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CORMORANT.

A

HISTORY

OF

BRITISH BIRDS.

BY

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MEMBER OF THE ASHMOLEAN SOCIETY.

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HISTORY OF BRITISH BIRDS.

CORMORANT.

COMMON CORMORANT. CRESTED CORMORANT. CORVORANT. GREAT CORVORANT. CRESTED CORVORANT.

Pelecanus carbo,	Pennant. Montagu. Bewick.
Phalacrocorax carbo,	Fleming. Selby. Jenyns. Gould.
Carbo cormoranus,	Temminck.

Pelecanus—A Pelican. *Carbo*—.....?

The Cormorant is a bird of almost universal distribution, and belongs to each of the four quarters of the globe. It is also accommodating in the situations it frequents, and makes itself equally at home on sea or land, both near the shore and farther from it, in barren and rocky places, as well as in those that are wooded, the neighbourhood of buildings, and the most lonely wilderness, rivers and lakes, fresh-water and salt.

In Europe it occurs on the shores of Norway and Iceland, and then in the south is seen in the Black Sea and the Grecian Archipelago, as also on the Swiss and other lakes and rivers. In Asia, in Siberia, Russia, and the Icy Sea, the Caspian Sea, and India; in America, from Greenland and Hudson's Bay to Canada and the United States.

The Cormorant used formerly to breed near the lighthouse at Flamborough Head, in Yorkshire, as it does still, or did not long since, in the neighbouring rocks of Raincliffe, before Buckton Hall. In Suffolk they have been known to build near Fritton Decoy, taking possession of part of a rookery, and they used to do so formerly, according to Sir Thomas

Browne, at Reedham, upon trees. Other building-places mentioned are the Ross of Kircudbright, St. Bees' Head, and the Isle of Man.

It is common on the Norfolk coast near Yarmouth, in the neighbourhood of the broads, especially in the autumn. One was shot at Herringfleet, in breeding plumage, on the 4th. of April, 1848; also in Dorsetshire. In Cornwall, about Falmouth, Gwyllyn Vase, Swanpool, Mainporth, Pennance, and other parts. In Oxfordshire, a fine bird of this species was shot by Frederic Dashwood, Esq. on the piece of water in Kirtlington Park. In Berkshire it has occurred on Frilham Pond, near Newbury, namely, in November, 1803. In Worcestershire, one at Hewell Park, near Bromsgrove, the seat of the Hon. Robert Henry Clive, M.P., the early part of April, 1849. Dr. Heysham has recorded that about the year 1759, one of these birds perched upon the castle at Carlisle, and soon afterwards removed to the Cathedral. In another instance a flock of fifteen or twenty alighted in a tree on the banks of the River Esk, in the same county of Cumberland, near Netherby Hall, the seat of the 'Graham of Netherby Clan.'

The Cormorant has been met with near Godalming, Surrey. In Lincolnshire, on Croxby Lake and other places. An immature specimen was shot on the Thames at Swanscombe, in Kent, in April, 1848. They often frequent the water around Walton Hall, Yorkshire, in the winter.

In Orkney it is a native bird; so also common in Ireland. One was shot on the wing with a rifle by the Hon. Mr. Plunkett, son of Lord Plunkett, and having hit it in the neck, the bullet cut in two a large eel, which the bird had in its throat at the time. This singular circumstance is related in 'The Naturalist,' volume i., page 68, by Samuel Hannaford, Esq., Jun.

Mr. John Dutton, R.N., has favoured me with some particulars of these birds. He says they always dip their wings in the water on first taking flight from their resting-places.

They often collect in parties of thirty or forty, and occasionally in very large bodies, more than a thousand having been seen together at one time.

On the land they are dull and heavy. They are only to be seen to advantage on the water. They roost indiscriminately on rocks or high trees, houses and other buildings, posts,

or logs of floating timber, and may often be noticed perched on a rail or withered tree by the water side. They now and then follow the course of a river for several miles inland, both by flight and swimming. Sir William Jardine says, 'We have known several birds take up a regular station, remaining to fish on the river, and roosting during night on its banks, upon some overhanging trees, and where inland lakes or waters are situate at no great distance from the sea, they are constantly frequented.'

Under the head of 'Sporting by Steam,' a curious circumstance is related in the 'Zoologist,' page 3712, by the Rev. G. Gordon, of one of these birds having been struck down and killed by the funnel of the engine of an express train, as it was crossing the Loch of Spynie, in Elginshire, on the 20th. of September, 1852. It had a flounder ten inches long in its bill at the time, and both bird and fish were taken up. On the sea these birds are undeniably shy, yet on inland water, that for instance at Mr. Waterton's, where not disturbed, they seem to have little fear.

Young Cormorants become perfectly tame, and are readily trained in this country, as well as in China, where, as is well known, the practice is a regular and established one, to catch fish for their owners, the precaution being taken of placing a ring round the neck of the bird, to prevent the prey from being totally swallowed. Montagu mentions one which never seemed to be so happy as when permitted to remain by the side of its master. Some kept by Dr. Neill used to roost with the poultry, but to usurp the best places. One of them laid two eggs while in the domesticated state. Sir Robert Shafto Adair, Bart. reported to Mr. Yarrell the circumstance of a pair of Cormorants having fed and brought up a nest of young Ravens, whose own parents had been destroyed. They provided them with a constant supply of fish.

My friend the Rev. R. P. Alington mentions in 'The Naturalist,' vol. iv., page 209, how the Cormorant not unoften rests, apparently after long journeys, upon elevated spots. Many years ago one perched upon the tower of West Rasen Church, as another had previously done on the splendid spire of Louth Church. This reminds me of a still more remarkable circumstance with regard to this church and another denizen of the sea, which he once narrated to me, as having, I think he said, seen himself, when a boy at school in that

town, at all events it occurred at the time. A sailor, for the sum of five shillings, undertook to stand on the top of the spire: he first ascended one of the pinnacles, on which he stood on one foot, and next went up one side of the spire, but finding one of the knobs, with which it is studded, broken off, he descended, and succeeded in another place. He then tied his neckerchief to the weathercock, and danced a hornpipe round it, on the millstone at the top. The spire was at that time about two hundred and seventy feet high, the uppermost portion having been struck down by lightning. It has since been restored to its original height of three hundred feet.

Nothing is more interesting than to see a Cormorant fishing, so well does he swim, and so quickly does he dive. There he is, long and low in the water, like a pirate craft, and equally swift for his size. To pursue is to capture, and to overtake is death. Nor is he ever becalmed, wind-bound, or without the weather-gage; or if he floats indeed on a surface unruffled by a breath of air and as smooth as glass, he has oars which are never motionless, and his upright head is unceasingly on the look out. Now he raises up his body, and down below and onwards he plunges, as if in the act of making a sommersault: you cannot help but look with interest for his re-appearance, and on a sudden he starts up after a lengthened dive, where you perhaps expected him, or still more likely in a different spot—a fish you may be almost sure he has.

In the old days of the flint-and-steel guns, the first flash used to send the Cormorant down, so quick was his eye, and even now it is difficult to get within shot. They fly strongly and well, though not very fast, and at a considerable height, if over the land. They may often be seen standing on the shore or rocks apparently to dry their wings, previous to which the one kept by Montagu was observed to beat the water violently with its wings without moving from the spot, then shake its whole body, ruffle its feathers, at the same time covering itself with water, and this many times together with short intervals of rest. They are able to perch on trees. The young dive instinctively even from the very first.

It is curious to watch the Cormorant swallowing, or attempting to swallow a fish, eel, or other, too large to be got down at once; sometimes as much as half an hour is passed in the attempt, before a successful issue is come to·

at last down it goes, and always head foremost. Fish are its natural food, and those of the size of a herring or mackarel it can swallow whole. One has been seen to carry an eel it had caught to a rail it had previously been sitting on, strike it with three or four hard blows against the rail, and then after tossing it up into the air, catch it by the head, and swallow it at once. Colonel Montagu says, 'If by accident a large fish sticks in the gullet, it has the power of inflating that part to its utmost, and while in that state the head and neck are shaken violently, in order to promote its passage.' He adds, speaking of a tame bird he had, 'to a Gull with a piece of fish it will instantly give chase: in this it seemed actuated with a desire to possess the fish, for if the Gull had time to swallow it no resentment was offered.'

Meyer writes, 'When this bird is engaged in fishing, it frequently swims with its head beneath the surface of the water, in order, most probably, to overcome the difficulty, caused by the ripple on its surface, of seeing its prey; (or rather, in my opinion, to try to swallow some fish it has already caught, and stretching out its neck to aid it in doing so,) and from time to time it dives under to catch the fish, which it can pursue for more than sixty or seventy yards under water, before it is obliged to come up for air. Several Cormorants may be seen at a time sitting side by side on the water's edge, looking out for fish, and if they are frightened, they rise up to a sufficient height in the air to be out of gunshot. When this bird is met with at a distance from the sea it frequently seems to lose its presence of mind, and is easily approached and captured.' When attacked at close quarters on its natural element, it defends itself to the last with its strong bill, and is a formidable antagonist. Meyer also asserts that the birds frequently assist each other in killing the more unmanageable fishes, but if so it must rather, I should think, be from a selfish motive, and with a private end in view that they are thus officious in being 'in at the death:' I do not incline to think that there is much disinterested generosity in the nature of the Cormorant.

The note of this species is harsh; a 'kree,' 'kraw,' or 'krell.' The young ones have a querulous cry.

The Cormorant naturally prefers an elevated situation for its nest, though in default of such it is obliged to put up

with a lowly one. It is well for those of a higher rank in creation than the bird when they can thus readily accommodate themselves to the circumstances in which they are placed. Many pairs congregate together.

In the former case the tops of lofty cliffs are built on, or, as the next best, high trees. Failing these, a bed of rushes is made to serve the purpose on the mainland; or the top of a low island rock is resorted to.

The nest, which is large, is composed of sticks or sea-weeds, heaped up to the height of a couple of feet. The finer portions of grass forming the interior.

The eggs, small in proportion to the size of the bird, are of a pale bluish or greenish white colour, without polish, and of an oblong shape. Three, four, or five are usually laid, but sometimes six. This in the month of April or May.

As soon as the young are able to fend and forage for themselves, which is as soon as they can fly, they are conducted to the sea by their parents, and then left to their own resources. This is when they are about three weeks or a month old.

Male; weight, as much as seven or eight pounds; length, about three feet three inches; bill, yellowish brown, the tip horn-colour, hooked, and sharp-pointed, the base of the under mandible yellow. The upper bill is furrowed on each side nearly to the tip, without any appearance of a nostril. Iris, bright green, giving the bird a singularly wild look, and the gaze of some 'green-eyed monster.' Head on the front, upper part, and sides, black, with narrow white silky feathers intermixed, forming at the back a short crest, deficient in winter, and the white nearly extinct: it is erectile at will. Neck on the upper part, black, with the like intermixture of white feathers, on the lower part and the nape, greenish or bluish black, according to the light; chin, white; the throat and pouch under it are blue with yellow spots, margined on the sides with white, or greyish white in winter, the gular pouch is yellow; breast, rich greenish or bluish velvet black, excepting an oval white spot above the leg, which is distinguishable in flight; from this the bird is said by fishermen to have a watch under his wing. It varies in size and conspicuousness according to the season, and at times is only marked by one or two sparse feathers. Back, dark brown, with purple and red

reflections, and each feather is narrowly edged with deep velvet black.

The wings reach, when extended, from four feet four to four feet six inches; greater and lesser wing coverts, bronze brown, with a tinge of green; primaries, dull black; secondaries, blackish bronze brown, tinged with purple and green; tertiaries, also blackish bronze brown, tinged with purple and green. The tail, which is rounded at the end, is black, the feathers, fourteen in number, are remarkably strong and stiff, and when on the land the bird rests on them. The legs, which are thick and strong, are as the toes, black; webs, black.

The female is like the male in his winter plumage, and both assume summer plumage; length, about two feet nine inches; Yarrell says that her crest is longer than that of the male, and brighter in colour, but smaller in size.

The young are at first of a bluish black colour, and in a few days become covered with black down. In their first plumage, which is not fully attained in less than five or six weeks, they have the upper bill dark brown, the lower one yellowish brown; iris, brown. Forehead and crown, dark dusky brown, slightly glossed with purple green, the lower part of the sides of the head white; neck and nape, also dark brown, the pouch under the chin, and throat, dull yellowish white. Breast, dull yellowish brown above, mottled with greyish white, below dull white, varied with a little brown, the sides darker dusky brown; greater and lesser wing coverts, greyish black, the edges of the feathers blackish brown. Under tail coverts, dusky; legs and toes, nearly black; webs, nearly black.

Mr. Yarrell gives the following account of observations made on an old Cormorant, kept in the Garden of the Royal Zoological Society, Regent's Park, London, with reference to the changes in its plumage, incident to the approach of summer:—'Some white feathers on the side of the head and neck began to appear on the 4th. of January, 1832, and arrived at their greatest perfection by the 26th. of February. They remained in this state until the 2nd. of April, when they began gradually to disappear, and by the 12th. of May were wholly lost, having been fifty-three days arriving at perfection; making together a period of eighteen weeks three days. These white feathers are new ones, much longer than the black feathers of the same part, rounded in form, and in

some degree resembling bristles. Some white feathers began to appear on the thighs of the same bird on the 25th. of January, and the patch was completed in five weeks. These white feathers began to disappear about the 16th. of June, and by the 20th. of July were almost entirely gone.'

The engraving is from a spirited drawing sent by Theodore Compton, Esq.

GREEN CORMORANT.

GREEN CORMORANT.

CRESTED CORMORANT. SKART. SCARF. CRESTED SCARF. SHAG. SHAG CORMORANT. CRESTED SHAG. GREEN SCOUT. COMMON SHAG.

Pelecanus cristatus,	PENNANT
" *graculus*,	MONTAGU. BEWICK.
Phalacrocorax cristatus,	STEPHENS. FLEMING. SELBY.
" "	JENYNS. GOULD.
" *graculus*,	STEPHENS. FLEMING.
Carbo cristatus,	TEMMINCK.

Pelecanus—A Pelican. *Cristatus*—Crested.

THIS species is common on the northern shores of Europe, those of Norway and Sweden, Lapland, Finland, Russia, Iceland, and the Ferroe Isles, and is not unfrequent about the islands of the Mediterranean—Corsica, Sardinia, and Cyprus; also in Asia, both on the coasts and lakes of Siberia, and Kamtschatka; so too in America.

In the county of York a young bird of this kind was shot by the keeper of Andrew Lawson, Esq., at Rawcliff, near Boroughbridge, towards the end of October, 1848. In Oxfordshire one was obtained on the River Isis, near Oxford; and in Berkshire one near Pangbourne, in September, 1794. In July, 1851, a pair of these birds, in immature plumage, were killed at Burton Joyce, on the River Trent, six miles from Nottingham, as Mr. John Felkin, Junior, informed me, and one of them was obligingly presented to me by that gentleman. A specimen was shot near Oxford in the beginning of 1851.

In Surrey it has occurred near Godalming. It is thought very rare at Yarmouth, in Norfolk, and the specimens which occur are chiefly seen in the autumn, and mostly immature. In Cornwall one, a young bird, was shot near Pennance Point, Swanpool, Falmouth, in 1854. One killed at the

mouth of the Yealm, April 2nd., 1852. It is not an uncommon species in those parts. Building-places exist in the Isle of Man, and at St. Bees' Head.

In Scotland the Green Cormorant breeds in many places along the coast of Kircudbright and Sutherland, Whiten-Head, Handa, and others; the Bass Rock and the Isle of May. So also in Orkney are they common; as likewise in Ireland.

This kind keeps exclusively to the sea.

On the ground these birds walk but indifferently. They sit in an upright posture, resting partly on the tail, but sometimes, Meyer says, lay down flat. They seem fond of spreading and flapping their wings, as if to dry them, when perched, as they often continue to be for a considerable time, on a low rock or sand-bank. They swim and dive in the most perfect manner. The head, or rather the neck, is carried very erect, and the body sunk low in the water. They do not remain swimming for a long time together, but either fly about or repair to the rocks or the land for a change.

These birds return home regularly about sundown, from their feeding places, flying in a straight line, and low over the water, if the weather be fine, but at a good height if it be rough or lowering.

The old and young birds appear to keep in separate flocks or companies.

They feed on fish, and dive after them to a depth of from one hundred to one hundred and fifty feet.

These Cormorants make their nests on the ledges and shelves of cliffs or caves over the sea, lower down than the other species. Many pairs, a score or more, frequent the same place. They return to it annually for the breeding-season. Montagu mentions his having counted thirty together on a small rock. The bird sits upright on the eggs.

The nest is a mass of sea-weed, softened off internally with the finer sorts of grass.

The eggs are three, four, or five in number, and their original colour is white; but they soon become stained and discoloured.

Male; weight, about four pounds; length, two feet four or five inches. Bill, at the base of the under mandible, yellowish green, the remainder dusky black; iris, green. There is a rich dark green crest on the head in the spring, which is

erected and even bent forwards at the pleasure of the bird. In some specimens it consists of only one, two, or three plumes, but in others is much more developed, probably with more mature age; their length upwards of two inches, and bent forwards. In autumn and winter the crest is absent. Crown, neck, and nape, rich dark bronze green, the plumage of a silky texture. In some individuals a few white feathers have been noticed. Chin and throat, rich dark green, the pouch under the chin is yellowish green with specks of black; breast, rich dark green, the plumage silky. Back on the upper part, dark green, with purple, green, and bronze reflections, the feathers narrowly edged at the tip with black.

The wings expand to the width of three feet eight or ten inches; greater and lesser wing coverts, dark blackish green, shewing reflections of purple, green, and bronze, the feathers narrowly edged with velvet black. Primaries, black; secondaries, black; tertiaries, black. The tail is short, wedge-shaped, and black in colour. It contains twelve feathers; they are strong and elastic, forming, as already noticed, a support for the bird when on land. Legs and toes, dusky black; the middle claw is serrated; webs, black.

The female resembles the male, but is less in size; weight, three pounds and a quarter; length, about two feet three inches.

The young bird is at first covered with black down, which soon gives place to the regular plumage, namely, head, crown, neck, and nape, greyish black tinged with green; chin and throat, white. Breast above, greyish brown, on the middle and lower part greyish white, the sides dusky; back, brown, tinged with dull green; the black edge to the feathers is wider than in the old bird. The tail dusky, each feather edged with pale grey, the tips white; upper tail coverts, dusky.

Sir William Jardine mentions one of these birds which he saw of a light grey appearance. A cream-coloured specimen was shot off the coast of Iona, in the summer of 1854, by Mr. Colin Mc'Vean; as Henry F. Wood, Esq., of Southfield Square, Bradford, has obligingly sent me word. All such occasional varieties pay the penalty of 'shewing false colours,' and are sure to receive a shot.

The engraving is from a figure made by John Gatcombe, Esq., of Plymouth. Theodore Compton, Esq. has also obliged me with a drawing of the bird.

GANNET.

COMMON GANNET. SOLAN GOOSE. SOLAND GOOSE.

Sula alba,	Fleming.
" *bassana*,	Selby. Jenyns. Gould.
Pelecanus bassanus,	Pennant. Montagu. Bewick.

Sula. Sulao—To rob or spoil. *Alba*—White.

The Gannet, in Europe, is frequent in Norway, Sweden, the Ferroe Isles, and Iceland, and thence advances to Portugal, Spain, and the Mediterranean generally. It thus occurs on the northern shores of Africa. In Asia it is equally common, and is also assigned to South Africa and Madeira. In America it extends from Greenland and Labrador, to the United States, as far south as Carolina it is said, and probably still further.

Gannets breed in immense numbers on Ailsa Crag, in the Firth of Clyde; the Bass Rock, in the Firth of Forth; the Stack of Souliskerry, near the Orkney Islands; Corea and St. Kilda, in the Hebrides; Lundy Island, in the Bristol Channel; and the Skelig Isles, off the coast of Ireland.

The Solan Goose has not unfrequently been met with quite inland. Thus one was shot in Fulbourn Fields, Cambridgeshire, the latter end of September, 1852. Another, a young one, in 1853, on some high ground called Kirmond Top, near Swinhope House, Lincolnshire, the seat of George Marmaduke Alington, Esq. One near Great Grimsby, an adult bird, about the 1st. of May, 1850. One was found at Culford, near Bury St. Edmonds, Suffolk, in December, 1844; a second was seen in the same neighbourhood a few days after; and a third was procured on Icklingham Heath, in the beginning of November, in 1849.

GANNET.

Joseph R. Little, Esq., of St. John's College, Cambridge, has written me word of one which was shot in January, 1853, at Elderwell, near Whittlesea, Cambridgeshire, at least twenty miles from the sea. He says in another letter that they occasionally stray so far inland. Mr. M. C. Cooke informs me of one found in a field at Swanscombe, in Kent, in the spring of 1847. Another was obtained at Frensham Pond, near Farnham, Surrey.

The Gannet has occurred two or three times in the county of Northampton.

A young one was taken in the parish of Ash, near Godalming, Surrey, during the autumn of 1847. In Norfolk, they are not uncommon about Yarmouth in the autumn, following the shoals of fish as they pass along the coast. They occasionally occur also in the spring. Several were shot in the Roads, after the severe gale of October 31st., 1827.

One was taken near Wisbeach, Cambridgeshire, in 1843; it was in company with some tame Geese. Two others, males, apparently exhausted after a gale from the north-east, in the summer of 1849.

In Yorkshire, one was taken in a field near Beverley. In Berkshire, one, a young male, was shot near Wytham, the seat of Lord Abingdon, by his Lordship's gamekeeper, on the 14th. of October, 1838. Another was seen at the time; and a third about the same time was seen at Weston-on-the-Green, Oxfordshire, in which neighbourhood others have been previously noticed.

In Cornwall, this species is seen occasionally near Falmouth, at Gwyllyn Vase, Swanpool, and other places. One, the Hon. T. L. Powys wrote me word, haunted Plymouth Sound in 1855.

In Scotland one was found, a young bird of the year, on Moffat Water, Dumfriesshire, in the latter part of October, 1828. They breed on some of the rocks on the northern part of Sutherlandshire. In the Orkneys they are abundant, especially in the autumn.

In Ireland they are occasional summer visitants.

They migrate southwards towards winter, and northwards again in the spring; the latter towards the end of the month of March or the beginning of April, 'over the sea, over the sea,' and occur with us mostly in the summer, but some have been met with in February and March. Many occurred in March, 1807, and in February, 1808.

Great numbers of Gannets are taken for the sake of their feathers and down, which are very valuable. They are sold for as much as one and eightpence each. They are also eaten by those who can get no better food. They are tameable birds, and will live for many years if kept by a piece of water.

Montagu points out a very curious peculiarity in the formation of the Gannet. I give the subjoined extracts from his account:—

'In the act of respiration, there appears to be always some air propelled between the skin and the body of this bird, as a visible expansion and contraction is observed about the breast; and this singular conformation makes the bird so buoyant, that it floats high on the water, and not sunk beneath its surface as observed in the Cormorant and Shag. The legs are not placed so far behind as in such of the feathered tribe as procure their subsistence by immersion: the Gannet, consequently, has the centre of gravity placed more forward, and, when standing, the body is nearly horizontal like a Goose, and not erect like a Cormorant.

Having, by the dissection of a specimen of the Gannet for preservation, noticed the slight and partial adhesion of the skin to the flesh of the whole under part of the body, we availed ourselves of the opportunity of paying more attention to the structure of this bird, and by experiments endeavoured to discover to what extent, and upon what principle, the inflation of the body was performed.

The appearance of so singular a conformation, brought to recollection what Buffon relates of the Pelican; who remarks, that from the lungs the air passes through axillary pipes, into a thick vesicular cellular membrane, that covers the muscles and envelopes the whole body. The structure, however, of the Gannet, although probably intended for similar purposes, is very different from that of the Pelican, according to the relation of that naturalist.

By comparative anatomy it has been clearly demonstrated, that birds in general are provided with air-vessels in different parts of the body, and that many of their bones are not destitute of this contrivance, admirably fitted for increasing their levity, and consequent buoyancy, as well as progressive motion through that element in which they are intended principally to move; and that too, with a velocity that far surpasses all other parts of animated nature. Mr. John Hunter, (in the Transactions of the Royal Society,) proves that the

air-cells in the parts already mentioned, have a free communication with the lungs, by means of openings on their surface, through which the air passes readily into them.

Thus far have the scientific researches of that anatomist contributed to our knowledge on this subject. No one appears to have noticed the phenomena attendant on the construction of the Gannet, or to what further extent this circulation of aerial fluid is carried in some particular species of birds, a circumstance which demands our highest admiration, when we contemplate the advantages of such a structure in conducing to the comforts, and perhaps to the very existence of such animals. On each side nearly equidistant between this pectoral membrane and the back, is situated another longitudinal one, very similar to the last, but perforated; between this and the pectoral are about nine irregular transverse membranous septa that hold the skin firmly to the body, having a free communication with each other. The skin is also furnished with a transparent cellular membrane, the cells being regularly perforated close to the base of each feather; at the upper part of the breast is a large bag, which extends some way up the neck; this is attached to the skin by the septa of innumerable small cells, but no opening into this cellular bag could be discovered; the introduction, however, of a small pipe through an artificial aperture clearly demonstrated a passage to the lungs, as the whole internal cavity of the body was inflated, and the air issued from the trachea. Upon opening this bag, the passage of communication with the internal parts appeared to be under the shoulder blades, (clavicles,) as a thin perforated membrane was perceived at the bottom, leading to the thorax, not directly into the lungs, but near the part where the trachea divaricates, and afterwards communicating with the lungs. It could not, however, be discovered where the air could find a passage from the great magazine into the cellular bag, and yet there is every reason to conclude that at this part some valvular passage exists. Pursuing our researches we observed at the bottom of each lobe of the lungs a considerable opening for the passage of air into the cavity of the body.

From what has been already observed, it will not be unreasonable to conclude that the Gannet is endowed with such singular properties for very different purposes than those of long and continual immersion, of which we have

before stated it appears to be incapable. But such a power of inflation must contribute greatly to lessen the concussion in its rapid descent upon water in order to seize its prey. Besides, as the enlargement of the surface, without materially adding to the specific gravity, must greatly contribute to its buoyancy both in air and water, it is well adapted for residing in the midst of the most tempestuous sea, floating on its surface in the most perfect security, and following those shoals of fishes on which depends its whole existence. Thus when all other birds are compelled to seek shelter in bays and creeks, the Gannet is enabled to brave the severest weather in all seasons without attempting to near the shore. This contrivance may also be of the most important service to an animal which is constantly exposed, even in the most inclement season, and cannot quit its station without starving. Nothing could possibly conduce more to its security against intense cold, or be better adapted to preserve the necessary temperature of animal heat, than the intermediate air dispersed between the skin and the body, since that element is found to be a non-conductor of caloric. Upon this principle, what animal can be more securely protected against cold, or retain its vital heat so effectually as the Gannet of such birds as are almost surrounded with a body of confined air, divided by cells, and intersected by membranes between the skin and the body, and that skin so amply covered with a light porous substance filled also with air and impervious to water. The Gannet is capable of containing about three full inspirations of the human lungs divided into three equal portions, the cellular parts under the skin on each side holding nearly as much as the cavity of the body.

Now as a full or extraordinary inspiration of the human lungs has been considered to occupy a space of about sixty cubic inches, ('Philosophical Transactions,' volume lxix, page 349,) so the Gannet is capable of containing not less than one hundred and eighty cubic inches of air at one time, subject to the will of the bird under certain impressions.'

These birds roost on rocks along the coast, or on lonely islets in the open sea, or on the water itself in default of the former. Vast numbers congregate together. The following occurrence was recorded in the 'Sherborne Journal:'—'A servant of the Rev. F. J. C. Trenon, Rector of Langton, observed, on the 23rd. ultimo, an unusual commotion among the Swans in the Fleet, near Langton, which proved to be

a battle between a Gannet and two full-grown male Swans, the latter both attacking at the same time, and following up the contest most vigorously with the former, who defended himself most resolutely for a very long time, and ultimately defeated the Swans, beating them both off, and laying them prostrate, totally disabled, helpless, and seemingly seriously injured. The Gannet, much exhausted by the protracted struggle, was easily caught alive, and very little the worse for fighting.'

The following singular circumstance has been communicated to me by Miss Rickaby, of Burlington Quay:—

'On the 22nd. day of April, 1838, after exceeding stormy snowy weather for two or three days before, an old full-feathered Gannet was found dead on Swainby Moor, in Cleveland, about twenty miles from the sea-coast. This bird had evidently been driven that same night inland by the force of a tremendous wind from the north-east, and had flown in a state of blindness as long as strength lasted, it being found scarcely stiff, and with about two inches and a quarter of the sharp beak, or snout, of the Garfish forced into one eye, leaving only about half an inch visible, when it was brought by the person who picked it up to the late Rev. George Marwood, of Busby Hall, who on making this discovery of the mode of its death, pulled the instrument of it out, and sent it the next day to Mr. Chapman, of York, to be preserved. It was returned in the course of a few weeks after to Mr. Marwood, in a case, and the eye, with the portion of the beak of the Garfish placed through it as when found, was preserved in spirits, and sent with it to Busby Hall, where the whole were when this account was written, March 4th., 1840, in the possession of the late Rev. George Marwood.'

It is described as a beautiful sight to watch the Gannet hawking for, and stooping on its prey. It flies with great power, agility, and freedom, the wings being quickly beaten, or at times skims along in a steady sailing manner: thus coursing on at a greater or less height, or catching sight of a quarry, it is down upon it like a thunderbolt, straight, or in a slightly slanting direction, the wings partly closed, dashing the water into foam as it plunges, and soon re-ascends, rarely without its prey. The time that elapses between the plunge and the emersion, is about fifteen seconds. Sometimes after the bird has arrested its flight

for a stoop, on perceiving either that it has been mistaken in the supposed object, or that the intended prey has already disappeared, it sails away on a fresh voyage of discovery.

Selby says that Gannets are long-lived birds, some that had been recognised from particular marks, having been observed to return to the same stations for upwards of forty-eight years.

When engaged with their nests they become very tame, and will allow themselves to be stroked with the hand, without any sign of displeasure or alarm, beyond the utterance of a low guttural note. It is said that they are unable to rise from the water, except against the wind, and consequently that they may be taken in that situation by being run down upon in a boat.

They feed on fish—herrings, pilchards, anchovies, sardines, and sprats especially, such being found near the surface. They are swallowed head foremost.

The note is a dull 'grog, grog.'

Great numbers of these birds build together in the same situations, on the sides of precipitous cliffs and rocks, the nests being placed almost close to each other. These are made of sea-weed and grass.

The egg, for there is only one, is white, or with a pale tinge of blue.

Both parents sit; the period of incubation being about six weeks.

Male; weight, between six and seven pounds; length, about two feet and three quarters or over, up to three feet; bill, pale greyish horn-colour, the tip fading into white, and a little inclined down, the edges somewhat serrated. The upper mandible has a ridge running along it nearly from the base to the tip, and no nostril is apparent; the part about the base of the upper mandible black, which colour extends back over the eye in an arched form, somewhat like a spectacle. Iris, pale yellow, giving the bird a staring appearance; eyelids, blue; forehead, black. Head, crown, and neck above, buff-colour; nape, white; chin, dusky black on the centre and downwards for some distance under the gular pouch; throat, otherwise white; breast, white; back, white.

The wings, which are long, have the first quill feather the longest. They expand to the width of six feet; greater and lesser wing coverts, white; primaries, black; greater and lesser under wing coverts, white. The tail, white, is of

twelve feathers, the two middle ones being much longer than the others: they are strong and pointed; upper tail coverts, white; under tail coverts, white. Legs in front, bluish green, or bluish yellow, behind nearly black; they are feathered down to the joint; toes, green, the first joints almost black: they are covered with small scales; claws, greyish white, the inner edge of the middle one dilated and serrated; webs, blackish grey.

The female is like the male.

The young bird is on first being hatched of a bluish black colour; in about a week it becomes covered with white down. In its first plumage it is totally different from the old bird, and at the same time of an exceedingly elegant appearance. Bill, nearly black; iris, dusky slate-colour, the eyelids blue black. Head, crown, neck, and nape, darker or lighter slate-colour, according to the age of the bird, and each feather is more or less tipped with a triangular-shaped white spot; chin, throat and breast above, light grey, mottled with white, the tip of each feather being of the latter colour in a triangular-shaped mark; below, white. Back, dark or light slate-colour, according to age, the tip of each feather white. In the second year the white increases on the plumage. Plumage, dusky greyish black; tail, dusky greyish black; legs, lead-colour in front, behind, blackish; toes, blackish grey; webs, blackish grey.

In the third year the white increases, the tertiaries and long scapulars remaining dark, or spotted with dark. The full white plumage is acquired in the fourth year.

CASPIAN TERN.

Sterna caspica, SELBY. JENYNS. EYTON.
" " GOULD. YARRELL.

Sterna—.....? *Caspica*—Belonging to the Caspian.

OF this species, named by Pallas from the region where it was first discovered, the neighbourhood of the Caspian Sea, a few have occurred on the lakes in Switzerland, and others in Germany: the Black Sea is also frequented. It is included among the birds of Saxony, Italy, Holland, and France, and has been found at Corsica, and among the islands of the Grecian Archipelago.

It has also been observed in Africa, on the west coast, in Egypt, and at the Cape of Good Hope. So too in Asia —in India, China, the Sandwich Islands, and the Friendly Islands.

These Terns breed on the coast of Denmark and Jutland.

One of these birds occurred at Yarmouth, Norfolk, in October, 1825; one in 1839; a third June the 9th., 1849; and one on the 16th. of July, 1850, when one or two others were said to have been seen. Another, June 12th., 1851; and another in the middle of August, the same year. In the county of Lincoln one was shot at Caythorpe, near Grantham, many miles from the sea, May the 17th., 1853. In Suffolk three or four were also seen, and one of them obtained near Aldborough.

They are of migratory habits arriving at the breeding-places in April, and departing in August. They travel, it is said, by day as well as by night.

Meyer says that the Caspian Tern, when disturbed, flies invariably towards the open sea and disappears, but never seeks its safety by resorting to the land, and thus its

CASPIAN TERN

appearance on fresh-water lakes or rivers is consequently very rare. They roost on the ground. They are very shy birds, always on the look out, and difficult to be approached, except when engaged with their nest and young, but sociable among themselves.

Like the Swallows, these, as all the other Terns, true to their 'nom de guerre,' are incessantly on the wing, and nothing can be more interesting than to watch them hawking for their prey.

They swim buoyantly on the water, but do not dive, beyond the plash made in plunging from their stoop.

They fly, for their size, in a peculiarly buoyant manner, and hover over a quarry like a hawk, pouncing down and catching it in an instant. They swim about occasionally, and run with ease and swiftness.

They feed on fish, especially those of the herring tribe, or any chance eatable that floats on or near the surface, and even the young of other birds: the former they appear to swallow head foremost.

The note is only a harsh cry.

The nest is a mere hollow scratched in the sand.

The eggs are two or three in number, of a yellowish stone or pale olive green colour, spotted with grey and reddish brown or blackish brown. They are hatched in about twenty days; soon run about, and are fed by the parents with small fish. 'Although the birds use great exertions to prevent an intruder from approaching the nest and eggs, by flying over his head, and making a considerable noise, yet it has been remarked that when they are once disturbed, they do not easily return to their nest, and are said even not to revisit the same spot the following year if they are fired at.' Several hundreds of pairs build together.

Male; length, one foot nine or ten inches; bill, vermilion red, paler towards the tip; iris, dusky reddish brown; head on the crown, neck on the back, and nape, velvet black, the feathers elongated towards the last-named, and ended in a rounded point. In winter, white, or with a few dark feathers on the hind parts; the sides of the head below the eyes are white; chin, throat, and breast, white; back, blue grey. The expanse of the wings in this species is four feet three inches and a half: they extend considerably beyond the end of the tail. The first quill feather is the longest;

greater and lesser wing coverts, blue grey; the first four, five, or six primaries are slate grey, with a brown tinge, the shafts white; greater and lesser under wing coverts, white. The tail, which is only slightly forked, is grey, according to Sir William Jardine; under tail coverts, white; the legs, bare of feathers for nearly an inch above the knee joint, are as the toes, black; claws, strong and curved, black; webs, black.

The female is not quite so large as the male.

The young are at first covered with white down. Before their first autumnal moult they have the bill dull red, the tip black; forehead and crown, white; chin, throat, and breast, white; back, greyish brown, with some bars and patches of a darker brown or blackish; greater and lesser wing coverts, also greyish brown, with marks of a darker colour; primaries, dark blackish brown. Greater and lesser under wing coverts, white. The tail is dark blackish brown at the end.

Besides the autumnal moult, the Terns change part of their plumage in the spring.

SANDWICH TERN.

STRIATED TERN, (YOUNG.)

Sterna Boysii,	PENNANT. FLEMING. SELBY.
" *Cantiaca,*	MONTAGU. BEWICK.
" "	JENYNS. GOULD.

Sterna—.....? *Boysii*—Of Boys.

THIS Tern has received its Latin name from that of Dr. Boys, its first discoverer; and its English one from Sandwich, in Kent, the place where it then occurred.

It is more or less common in various parts of Europe —Sweden, Denmark, Germany, Holland, and Friesland, France, Switzerland, Italy, and along the shores of the Mediterranean. In Africa, it has been found at the Cape; and in North America from Texas and Charleston to Florida; and in South America, in Mexico and Brazil. In Asia, in Kamtschatka; also in New Zealand.

In Yorkshire, the Sandwich Tern has occurred near Huddersfield; in Derbyshire, occasionally near Melbourne. In Cornwall, it has been met with about Swanpool, Falmouth, but is rare; also in Devonshire, Sussex, Suffolk, and Durham; in Norfolk, it is not uncommon about Yarmouth, one was shot at Hunstanton, September 6th., 1851. In Oxfordshire it has been killed on Otmoor and near Oxford, the latter specimen on the 24th. of August, 1847; three or four others were shot near Oxford, on the Isis, April 23rd., 1853.

In Ireland, the species occurs as an occasional straggler.

In Scotland, it has been noticed in Sutherlandshire and on the Frith of Forth, the Isle of May, and the Berwickshire coast.

They breed on the Bass Rock, off the coast of Berwick; also in Kent, about Romney Marsh; in Essex, at the mouth of the Blackwater River; and in Northumberland, on the Fern Island and Coquet Island.

They are exclusively birds of the sea, and only seen inland as chance stragglers.

They arrive about the end of April, or towards the middle of May, and are gone again by the end of August or beginning of September. They migrate by night.

'As soon,' says Selby, 'as the young birds become tolerably fledged, but before they are altogether able to fly, they frequently take to the water, swimming off to the smaller rocks, where they continue to be fed by the parents, until capable of joining them in their fishing excursions.' They are naturally shy birds, and rise altogether if approached, assembling in vast numbers, being sociable among themselves. They roost on the ground, near the water, gathering together for the purpose about sunset, but their voices are heard afterwards till far into the night, and again early in the morning, while trimming their feathers for the day.

Its flight is rapid, each stroke of the pinions sending it quickly onwards. Ever on the wing, its whole deportment is elegant and graceful, and those who will 'take the wings of the morning' and go down to the sea to enjoy the sight of the 'great deep,'—always the same and always different —and all the 'wonders of the shore,' will see nothing more worthy of notice—where ten thousand things are worthy of notice—than the 'air and the grace' of the Sea Swallow on the wing, as it now skims along backwards and forwards, now stoops on its game, and now soars aloft for a more distant flight.

They feed on fish—the sand-launce, gar-fish, and others, darting down on such as come within ken, or sweeping up any that chance between the waves when running high.

The note is a loud, hoarse, and grating cry or scream, likened to the syllables 'pink,' or 'cree.'

These birds live together in large colonies, hundreds and even thousands of pairs crowding together in the same places, the eggs in consequence being so close together that it is difficult to avoid treading on them. The situation chosen is a sandy spot, covered at the most with short and bare vegetation. If the nesting-place is threatened, the birds fly about in a cloud, or sweep or dash about an intruder.

They then may be approached, as they cannot be at other times. They are late in breeding, seldom commencing till the month of June.

The eggs are usually two, but sometimes three or even four in number. Meyer says, 'The bird sits on them during the whole night, but only occasionally during the day, and as in the preceding species, some few birds remain about the breeding-places, to keep watch during the absence of the rest. It has been asserted that these birds, although laying two or three eggs only for a brood, will, when the eggs are taken out of the nest daily, continue laying for a fortnight.' The eggs vary exceedingly, and are extremely beautiful. They are of a pale yellowish stone-colour, thickly spotted and marked with deep reddish brown, orange brown, blackish brown, and grey. Some are of a whitish, and others of a dull green ground colour, with spots of a darker shade.

Male; length, one foot five or six inches; bill, black, the tip yellowish white, farther extended in winter; iris, dark brown. Head, crown, neck on the back, and nape, black, with generally a little intermixture of white, and in winter the forehead and crown are white, or mottled with white and black, the back of the head with the most black, the edges of the feathers white. The feathers at the back of the head elongated into a slight plume ending in a point, this is followed by white, running into the bluish grey of the back; head on the sides below the eyes, white. Chin, throat, and breast, white, with a tinge of rose-red underneath, that is to say in summer, not in winter; back, pale bluish grey.

The wings have the first quill feather the longest; they expand to the width of two feet nine inches, and reach beyond the end of the tail; greater and lesser wing coverts, pale bluish grey. Of the primaries, the longest is slate grey, darker on the outer web, and more than half of the inner near the shaft from the point, the shaft white; the two or three next paler, and the succeeding ones still more so, till they shade away into the colour of the wing coverts; the inner webs paler than the outer; tertiaries, grey, the ends nearly white; greater and lesser under wing coverts, white. Tail, forked and white, the outside feathers dashed with grey on the outer webs; upper tail coverts, white; under tail coverts, also white. Legs and toes, dusky black, with a tinge of red, underneath the latter are yellowish; claws,

black, and much curved, hollow below and a sharp edge on the upper side; webs, dusky black, and yellow underneath.

The female has scarcely any of the red tint, and the tail is shorter.

The young, when towards a year old, have the upper bill dark brownish black, with a tinge of yellowish red, the lower one pale yellowish red or brown at the base, the space between the bill and the eye dark; iris, pale yellowish brown; forehead, greyish white. Head on the crown, and back, blackish grey, the feathers edged with white; neck on the back, and nape, dull white; chin, throat, and breast, dull white; back, grey, mottled across with pale brown. Greater wing coverts, grey, the tips white; lesser wing coverts, grey, varied with crescent-shaped marks of pale brown; primaries, deep blackish grey, the inner margins and tips white, the outside one nearly black, except the shaft, which is white; tertiaries, greyish white, barred with dusky reddish brown. Tail, greyish dusky on the base and middle part, the inner webs and tips of the feathers white; legs and toes, dark dusky brown; webs, dark dusky brown.

In another stage of plumage the head is mottled with black and white, the back marked with angular spots of black, so also are the wing coverts and the tail.

ROSEATE TERN.

ROSEATE TERN.

Sterna Dougalli, MONTAGU.

Sterna—.....? *Dougalli*—Of (Mac)dougall.

THE species before us extends its flight in Europe, from Norway, Sweden, and Denmark, to France, Holland, Germany, and Italy. Specimens have been procured in Africa, at the Cape of Good Hope, and in Madeira. In Asia, from India; and in America it is plentiful in Florida.

This very elegant Tern was first discovered by Dr. Macdougall, after whom it was named. He found it on an island called Cumbray, in the Frith of Clyde. It has since been observed in divers other localities, among them in Cumberland, at Brugh Marsh Point, on the Solway Frith.

In Yorkshire specimens have occurred at Scarborough, Hornsea, and Hebden Bridge. One was shot at Swanpool, Falmouth, Cornwall, October 1st., 1846; so too in Devonshire, and in Norfolk at Yarmouth. Likewise in Oxfordshire, two on the River Isis, near Oxford, and one at Tusmore Park, near Bicester, in the summer of 1848. T. C. Eyton, Esq., of Eyton, has recorded its capture in Shropshire.

In Ireland it is a rare species; has occurred in the county of Dublin, and also in the Bay of Belfast.

They breed on the Fern Islands, the Walmseys, and Coquet Island, off the Northumbrian coast; also in numbers on Foulney Island, on the coast of Lancashire. In Scotland, in the Isle of May, in the Frith of Forth; and, as already mentioned, on the Cumbray Islands, in the Frith of Clyde.

This species arrives about the middle of May, and departs by the end of September.

When engaged with their young these birds shew great anxiety, and permit a close approach. They are naturally shy.

Their flight is as interesting and deserving of notice as that of the other species, and as you may have seen any of these birds in days of yore, so will you see them still and always, for nature changes not, but like her Maker, and obedient to His laws, is the 'same yesterday and to-day.' 'The sea is His and He made it' and 'all that therein is;' and it and all that belong to it obey ever and always His 'perpetual decree.'

These birds feed on small fish.

The note is expressed by the word 'crake,' or 'cræ,' uttered in a hoarse and grating manner.

This species makes its nest among the herbage there may be on low banks of sand, or shingle, or upon the bare ground itself.

The eggs are two or three in number; the ground colour yellowish cream white, pale brown, or yellowish olive green, spotted and speckled with grey and brown.

Male; length, one foot three inches and a half; bill, jet black, slender, and slightly curved, the base vermilion red; the inside of the mouth bright orange red. Iris, dark brownish black. Forehead, crown, neck on the back, and nape, jet black, the feathers on the latter parts elongated, and terminating in a point; the sides of the head, under the eyes, white. Chin, throat, and breast, white, the latter with a tinge of rose-colour, from which the bird derives its name, reminding an entomologist of the delicate moth called the 'maiden's blush.' This transient colour, like the hopes of early youth, 'too bright to last,' fades away with the life of the bird, and I hope that all the ladies who are my readers will preserve the same pleasing attraction as long as they live, remembering the maxim of Dr. Gregory, 'when a woman ceases to blush, she loses the most powerful charm of beauty:' so it is with the bird; its beauty is in its life—who then can wantonly shoot the graceful and chaste-coloured Sea Swallow?

Back, pale grey; greater and lesser wing coverts, pale grey; primaries, dark hoary grey on the outer webs, paler on the inner, verging to white at the tips. The shafts white, the first one has the outer web dark hoary, or nearly black; tertiaries, tipped with white. The tail, which is greatly forked, and the outer feathers narrow, is very long, and extends two inches, or in some specimens, nearly three inches beyond the closed wings, its colour white or very pale grey; the tail

looks very attenuated when drawn together. Upper tail coverts, white; lower tail coverts white; the legs, bare of feathers about half an inch above the knees, and toes, bright yellowish orange red; claws, black and hooked; webs, yellowish orange red, they are much scalloped.

In the young bird of the first year, the bill is brownish black, orange yellow at the base; forehead, white; crown, pale yellowish grey brown; neck on the back, and nape, black, barred with pale brown or whitish; chin, throat, and breast, dull white; back, bluish grey, barred with blackish or brownish grey, the feathers tipped with yellowish white. Greater and lesser wing coverts, bluish grey, barred with blackish grey, the tips of the feathers white, or yellowish white, forming a bar across the wing; primaries, blue grey, the outer web of the first one black, the others margined with white, the tips dusky with pale edges; secondaries, tipped with white, or yellow white, forming a second narrow white bar across the wing; tertiaries, blue grey bordered with brown, with a white edge. Tail, grey, the outer webs darker than the inner, that of the outermost nearly black, the tips of the feathers white; legs and toes, pale yellowish red; webs, pale yellowish red.

COMMON TERN.

GREATER TERN. SEA SWALLOW. GULL TEASER.

Sterna hirundo,	Pennant. Montagu. Bewick.
" "	Fleming. Selby. Jenyns.
" "	Gould. Yarrell.
" *major,*	Brisson.
Hirundo marina,	Ray. Willoughby.

Sterna—.....? *Hirundo*—A Swallow

It would appear that this species is not so common as is imported by its name, other kinds having been confounded with it in the first instance.

It visits Germany, France, Spain, Holland, Switzerland, Italy, and the Mediterranean, from Norway, Spitzbergen, and other places of the north. In Asia it is seen, Asia Minor; and in Africa on the west coast, in Madeira, and the Canary Islands. In America, in Greenland and about Hudson's Bay, and so southwards to New England and other parts.

In Cornwall it occurs about Gwyllyn Vase, Swanpool, and Falmouth, but is not common there, though generally elsewhere. It is however not unfrequently seen quite inland, as in Oxfordshire, especially in the spring months. In Worcestershire one, a young bird, was shot near Worcester, on the banks of the River Severn, in October, 1846. In Monmouthshire another, also a young one, was obtained on the 12th. of the same month; others were seen. Some large flocks had occurred a few years before. In Surrey this bird has been frequently shot at Frensham Pond, near Godalming. Two at Chertsey, October 6th., 1846. One was killed at Bushy Park, and others nearly forty miles up the Thames.

It is very common on the Yorkshire, Lincolnshire, and Norfolk coasts. Specimens, too, have occurred inland in the first-named county, at Leeds, though rarely, Huddersfield,

COMMON TERN.

Hebden Bridge, and Barnsley, by the margins of reservoirs and the course of canals. In Derbyshire one near Melbourne, May the 25th., 1845. It has been met with near Oxford. In Cambridgeshire it is found in the Isle of Ely during the summer months. Some were shot at March, the 7th. of May, 1850. The species is observed all along the south coast; in Kent, most numerously, it is stated, about Winchelsea, Dungeness, and Romney Marsh; Dorsetshire, Devonshire, and Cornwall; so in Essex, Norfolk, Suffolk, Durham, and Northumberland.

It is common in Ireland; also in Scotland, in the Frith of Forth, and along the coast, and has occurred in different years in Dumfriesshire; likewise in the Hebrides.

The Common Tern breeds near Skinburness, on Rockcliffe Saltmarsh, by Solway Frith, and a few on Solway Moss. Many on Foulney Island, on the Lancashire coast. Priestholm Isle, off the coast of Anglesea, is another nesting place, as also the Fern Islands, on the Northumbrian coast, and the Isle of May in the Frith of Forth, the Frith of Clyde, and also in the Orkneys.

They frequent low coasts, the borders of lakes, and the mouths of large rivers, and follow the course of the latter.

These birds arrive variously in different parts of the country in April, May, or June, and remain till the end of August, or through the month of September, or to the beginning of October. They migrate, it is said, by day, and travel slowly.

All the varied movements of the Sea Swallow in flight are performed with that striking ease and grace which is characteristic of these birds, whether on a calm summer day when the glassy surface of the sea shimmering in the sun is broken only by the leaping of the shoals of fish over which the Terns hover, or later on in the waning year when 'the winds their revels keep.'

Their food consists of small sea-fish, and, in fresh water, of minnows and any other small kinds. They sometimes pursue the Sea Gulls, and make them drop what they had caught for themselves, and then seize it before it reaches the water. They also capture insects, running about in pursuit of them on the ground.

The Common Tern lays its eggs on sand, rocks, or shingle, making little or no nest beyond scooping out a slight hollow: what there is, is placed either by the sea-side or in marshes, on islands, or by the sides of lakes and rivers.

The eggs are variously of a pale blue, pale yellow, green, brown, white, or light dull yellowish or stone-colour, blotted and spotted with grey, dark reddish brown, and blackish brown, three in number. They are laid from the latter end of May to the beginning of July.

The male bird assists the female in the task of sitting during the day, she taking charge of the clutch at night; in fine weather, however, the heat of the sun seems to be thought sufficient warmth, and the bird leaves them to its rays. Ten or twelve pairs of these birds breed together. The young come forth in fifteen or sixteen days, and are able to fly when about three weeks old. The old ones display much anxiety for their safety, and are very clamorous when any one approaches their station, flying round, and frequently even striking against them.

Male; weight, over four ounces to four and a quarter; length, one foot two inches, or two and a quarter to three. Bill, coral red, the tip very sharp-pointed and black, the extreme point yellowish white. Iris, dusky brownish black. Forehead, crown, neck on the back, and nape, deep black, ending in a queue; in winter duller in tint; sides of the head, white below the eyes, in winter the black becomes dull. Chin and throat, white; breast, dull white, with a faint tinge of rose-colour. Back above, grey, on the lower part white.

The wings extend to the width of two feet six inches; greater and lesser wing coverts, grey; the primaries have the outside web of the first darker, and the inner lighter, grey; the others with the outer webs and part of the inner hoary grey, the remainder of the inner webs white, the shafts white; secondaries and tertiaries, grey; greater and lesser under wing coverts, white. The tail, which is long and considerably forked, has the outer webs of the feathers pale grey, increasing in depth of colour to the outermost one, which is greyish black, the inner white; in flight the feathers are often closed together so as to look like only one; upper tail coverts, white. Legs and toes, bright coral red; webs, coral red.

The young are at first covered with mottled grey and white down. In their first year's plumage the bill is reddish yellow, the tip and upper ridge dark dusky brown. Forehead, dull white; crown on the hinder part and neck on the back, blackish with a hoary tint; chin, throat, and breast, white.

Back on the upper part, grey, each feather margined with white and greyish or reddish brown crescent-shaped marks; on the lower part white. Of the primaries the first has the outer web black, the others are grey, the tips hoary grey; secondaries, tipped with white; tertiaries, also tipped with white; upper tail coverts, white. Legs and toes, yellowish reddish brown; claws, dusky; webs, yellowish reddish brown.

One of these birds was shot at Lowestoft, in Norfolk, the 12th. of August, 1853, which was entirely of a snow-white colour, except a few minute grey lines between the bill and the eye, a little tinge of grey on the quill feathers of the wings, and a very slight smoke-coloured tint over the head.

ARCTIC TERN.

Sterna arctica, Fleming. Selby. Jenyns.
" " Eyton. Gould. Yarrell.

Sterna—.....? *Arctica*—Arctic.

The Arctic Tern, as conveyed by its name, is a bird of the north, and rears its young on the shores that are washed by the Arctic Seas, both those of the mainland of Europe, Asia, and America, and the lonely islands that are exposed on all sides to the raving blasts of the Polar Furies—Melville Island, Greenland, Iceland, and the Ferroe Islands; Baffin's Bay, Siberia, and Kamtschatka; also in the milder regions of Norway, Sweden, Lapland, Holstein, and Denmark, and farther south, in Holland, Italy, and the Mediterranean; and in Africa at the Cape of Good Hope.

In Yorkshire, individuals of this species have occurred inland near Sheffield; on the coast they are plentiful; so also in Durham. The Arctic Tern is not uncommon on the Norfolk coast; it has been occasionally killed near Oxford, and in other parts of that county. In Worcestershire, one, a young bird, was shot on the banks of the Severn, near Worcester, in October, 1846; great numbers had spread up the river in the second week in June, 1842. Also in Glamorganshire, at Swansea; in Monmouthshire; and in Somersetshire, at Bridgewater, Bristol, Clevedon, Weston, and other places; flocks of them appeared in the towns, hundreds were knocked down, and some even perched on persons in the streets. The like occurred in Worcestershire—near Worcester, Evesham, and at Cofton Hall, one of the seats of the Throckmorton family, a place associated with most pleasing recollections of my school-days: then, however, buried in deep retirement, now a railroad passes in front of it! Considerable flights were also seen in Gloucestershire, at Tewkesbury; in Herefordshire, near Here-

ARCTIC TERN.

ford; and in Wiltshire, at Devizes and Trowbridge; doubtless most of the intermediate and adjacent parts were likewise visited. In Surrey, one at Chertsey, October 6th., 1864.

These Terns breed in great numbers on Coquet Island and the Fern Islands, off the coast of Northumberland. Some also in Lincolnshire, on the coast near Skegness; and on the Isle of Anglesea, near Holyhead; a few on the Scilly Islands, in Cornwall. In Scotland, great numbers along the coast of Sutherlandshire, and on the Isle of May, in the Frith of Forth. A nest containing four eggs was found at Otmoor, in Oxfordshire, in the summer of 1834.

In Orkney, Shetland, and the Hebrides, they are more or less plentiful.

In Ireland, it is a common species.

The sea-shore and low grounds in its neighbourhood are the situations frequented by these birds.

They are sociable among themselves, and also mingle with other kinds when building their nests together.

I suppose that the name of Tern is derived from the habit the bird has of turning in the remarkable manner it does when pouncing on its prey. They are true birds of the air, and right pleasant it is to watch them, as each and every of the tribe, floating, falling, rising, sailing, turning, diving, in the kindred element whose lightness they almost seem to equal, on some 'smiling morn' which you will do well to hail when land and sea are ready to welcome you with the indescribable freshness of the early hours.

They feed on coal-fish, sand-launce, and any other small fish that come to their neb, all stray things being considered as such; these they capture on the wing; also water-insects and their larvæ, worms, and crustacea; on the shore or grounds near it severally, even following the plough, and availing themselves of the results of the turning up of the soil. The young are fed with the same food.

The note is described by Meyer as resembling the words 'greer, greer,' and 'give, give,' uttered in a soft tone.

This Tern contents itself with a slight hollow scratched out either in the bare sand, gravel, rocks, or grass, a little of the latter forming a lining, or the former alone sufficing, as the case may be, by the sea-shore, the borders of islets, or the mouths of rivers. Great numbers build together, and the nests are so closely contiguous that it is hardly possible to avoid walking upon them.

The eggs are two or three in number, rarely four; they are subject to almost endless variety, the ground colour being variously white, green, dull green, brown, pale blue, and pale yellow, spotted with grey and dark reddish brown. They are usually laid the beginning of June. The period of incubation is about fifteen or sixteen days.

Male; length, one foot three inches; bill, coral red, with sometimes a little blackish red at the tip: head on the sides below the eyes, white; forehead, crown, and neck on the back, deep black, ending in a rather rounded peak; nape, white. Chin, white; throat, pale grey; breast, grey; back, rather dark grey above, below white. The wings, when closed, reach to the end of the tail; greater and lesser wing coverts, grey; of the primaries, the first has the outer web dark leaden grey, nearly black, except the tip, which is grey; the others have the outer webs and half of the inner dark grey, the shafts white, the tips grey. The tail, deeply forked, has the two longest feathers on each side dark grey on the outer webs, the others white; upper tail coverts, white; under tail coverts, pale bluish grey. Legs, short, feathered to the knee joint, and, as the toes, deep red; claws, dusky black; webs, deep red.

The female is a little less than the male, and the black extends rather farther down the nape.

The young are at first covered with yellowish grey down, mottled with darker. In their first year, they have the bill red, the ridge of the upper mandible and the tip dull brown. Forehead, dull white; crown, a mixture of black and white, or grey; back of the head, neck on the back, and nape, dusky greyish black; the sides of the head below the eyes dull white; chin, throat, and breast, dull white. Back, bluish grey, mottled with crescent-shaped bars of brownish black on each feather, the tips pale yellowish grey; greater and lesser wing coverts, bluish grey, barred with crescent-shaped marks on the feathers of dusky black, and tipped with white; of the primaries, the first is leaden grey on the outer web, the others bluish grey, the inner webs of all nearly white; secondaries, dull bluish grey, barred with dusky black of a crescent-shaped form on each feather, and tipped with white; tertiaries, tipped with white; greater and lesser under wing coverts, white. The tail has the outer webs of the three long feathers on each side slate grey; upper tail coverts, white; legs and toes, pale orange red; claws, dusky; webs, pale orange red.

SOOTY TERN.

SOOTY TERN.

Sterna fuliginosa, LATHAM. WILSON. BUONAPARTE.
" " AUDUBON. NUTTALL.
Onychoprion fuliginosus, GOULD.

Sterna—.....? *Fuliginosa*—Dusky—smoky.

THIS Tern is mentioned as visiting Georgia, Florida, and Cuba, also Bermuda, the Island of Ascension, Christmas Island, and the Tortugas. Audubon relates a murderous onslaught made on the birds there by some sailors who were with him, reminding one of the proceedings at the same place of the Bucaniers. It belongs, moreover, to Australia and the islands of the South Seas. In Europe it has occurred in Germany.

A Tern of this species was shot in October, 1852, at Tutbury, near Burton-on-Trent, Staffordshire, and was secured for the collection of H. W. Des Vœux, Esq., of Drakelow Hall.

In Ireland, two have been procured at Wexford.

They are migratory in their movements, arriving in May, and leaving again by the end of August.

These birds assemble in vast numbers in the closest companionship and seeming friendship. They have been met with three hundred miles from land: 'How little do they think upon the dangers of the seas!' Some, however, have appeared fatigued, settling on the rigging of ships.

They hover, it is said, at times close to the water, when seeking for food.

They prey on small fish.

No nest is formed, but the eggs are laid in the sand under trees near the sea-shore, the birds scratching a hollow with their feet, and frequently fitting themselves into it to see that it will answer the purpose.

The eggs are smooth, and of a pale cream-colour, slightly

marked with different shades of pale brown and lighter tints of purple. The female, while sitting, is fed by the male in a tender and affectionate manner.

Male; length, one foot five inches; bill, black; from its base a black streak goes back to the eye; forehead, white, 'ending in a concave curve with a point over each eye;' head on the crown and sides, neck on the back, and nape, sooty brown black; the sides of the neck and the lower part of the sides of the head, white; chin, throat, and breast, white.

The wings, when closed, reach to within two inches of the end of the tail; primaries, dark sooty brownish black; secondaries, also sooty brownish black, but paler in colour on the outer edges; greater and lesser under wing coverts, white. The tail, which is deeply forked, has the outside feather on each side white on the outer web, the others are white at the base; the long feathers are grey below; under tail coverts, white; legs and toes, black; webs, black.

In the young bird the tail has the outer feather on each side light brown on the middle part, the base and the tip white.

WHISKERED TERN.

WHISKERED TERN.

Sterna leucopareia, GOULD. TEMMINCK.
" *Delamotte*, VIEILLOT.

Sterna—.....? *Leucop* *eia*. *Leucos*—White.
Parëion—The chee .

THE Tern thus denominated has, in Europe, been noticed in France and Italy, Hungary, Germany, and Dalmatia; in Africa, in Egypt; and in Asia, in Syria and Borneo.

In England, the occurrence of the first specimen was near Lyme Regis, Dorsetshire, the end of August, 1836. The fact was placed on record by T. C. Heysham, Esq., of Carlisle, and his name goes down to posterity in connection with it; as do those of other observers in like instances: 'dikaion gar autois, kai prepon de ama, on tö toiöde, tën timën tautën tës mnëmës didosthai,' as Thucydides used to have it. A second was shot on Heigham sands, Norfolk, on the 19th. of June, 1847, so P. Hansell, Esq. informed me. One, a female in adult plumage, is recorded in the 'Zoologist,' page 1820, by J. H. Gurney and W. R. Fisher, Esqrs., to have been shot while flying over Hickling Broad, Yarmouth, on the 17th. of that month: I conclude that one and the same specimen is intended.

In Ireland, another was obtained on the River Liffey, near Dublin, in the month of September, 1839.

Male; length, eleven inches and a half; bill, red, inclining to dark brown towards the tip; from its base a streak of white goes backwards below the eye, and gives the bird the name it has hence received. Iris, brownish black. Forehead, crown, neck on the back, and nape, black, in winter white, a black spot being left behind the eye; chin and throat, greyish white; breast, dark grey, paler in winter; back, dark grey, paler in winter.

The wings have the first quill feather the longest; greater and lesser wing coverts, dark grey, paler in winter; of the primaries the first is leaden grey on the outer web and on the inner portion of the inner web, the remainder of the latter white; the others paler grey; secondaries, grey also, but paler; greater and lesser under wing coverts, white. Tail, dark grey, lighter in winter; upper tail coverts, dark grey, paler in winter; under tail coverts, white. Legs and toes, red; webs, red, and deeply indented.

In the young bird of the year, the bill is red at the base, the remainder brown. Head on the crown, neck on the back, and nape, varied with brown and greyish black; back, brown, the feathers edged and tipped with dull yellowish red; secondaries, brown. Tail, blackish grey, tipped with white. Legs and toes, dull yellowish red; webs, dull yellowish red.

GULL-BILLED TERN.

GULL-BILLED TERN

Sterna Anglica, MONTAGU. BEWICK. FLEMING. SELBY.
" " JENYNS. EYTON. GOULD.

Sterna—.....? *Anglica*—Anglican—English.

MONTAGU appears to have been the first to distinguish this 'soi-disant' Anglican species, less peculiar to England than to any other of the countries where it is known, and two others, as will have been seen, do honour by their names to the discrimination of English naturalists.

It inhabits Europe, Asia, and Africa, occurring in Hungary, Italy, Turkey, France, Jutland, Holland, Egypt, Nubia, India, the Isles of Sunda, Java, the United States in North, and the Brazils in South America.

They breed in Denmark in the Sylt marshes.

In the county of Norfolk, one of these Terns was shot at Yarmouth, on the 31st. of July, 1849, and two others, a pair of adult birds, male and female, at the same place on the 1st. of September that year; one the 24th. of May, 1850, and one the beginning of July, 1851. In Yorkshire, one was captured near Leeds, in the West Riding, in July, 1843. In Cornwall, a specimen was shot by John Jenkinson, Esq., at Scilly, the end of May or beginning of June, 1852. Two in 1839, one of them in Kent, in the month of June.

They addict themselves to salt-water lakes, swamps, and other such localities.

They migrate in May and September.

They feed on winged and water insects, frogs and tadpoles, small fish, taken up as they skim along, and worms, when visible above ground; they are said also to prey on the eggs and young of other birds.

The note is like the syllables 'ha, ha, ha.'

The nesting-places of this species are marshy grounds not far from the sea-beach. A small hollow is scratched in the sand or gravel, and in this a few stems of grass and small roots are placed.

The eggs are two, three, or four in number, of a pale, as also of a dull greenish or yellowish olive-colour, marked and spotted with pale grey, reddish brown of two shades, and olive brown.

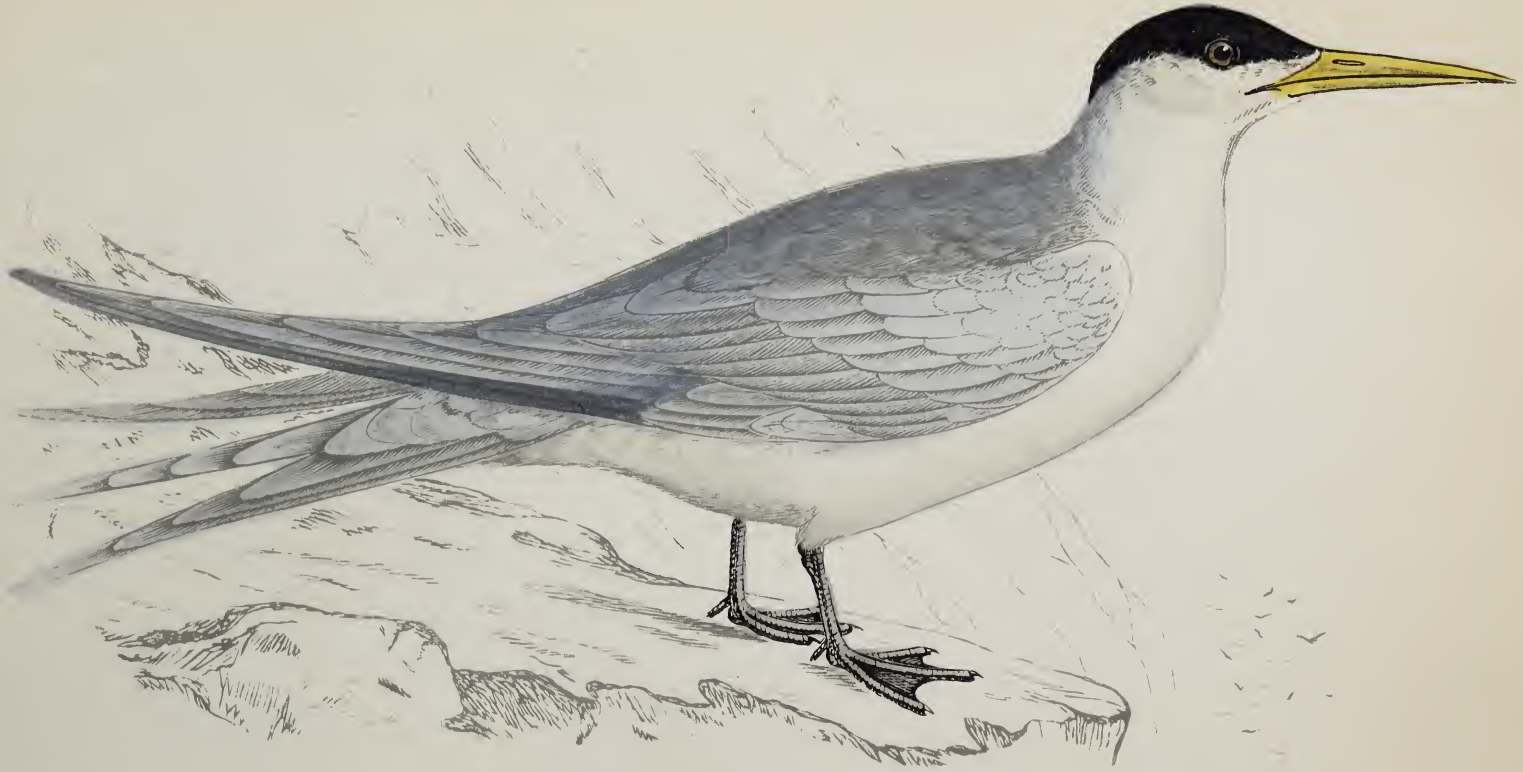
Male; length, one foot three inches and a half; bill, strong and black, with a projecting angle, as in the Gull tribe; a white streak runs back from it to the eye; iris, dark reddish brown; before the eye there is in winter a greyish black spot, and another towards the hinder part of the side of the head; forehead, head on the crown and back, neck on the back, and nape, silky black; afterwards a few of the feathers become edged with white, the shafts being the same, and so gradually more and more, till the former colour is entirely lost in the winter, except a few dusky dots behind the eyes; the feathers are rather elongated; chin, throat, and breast, white; back, dark bluish grey.

The wings are two feet ten inches in extent; they reach more than two inches beyond the end of the tail; greater and lesser wing coverts, dark bluish grey; of the primaries, the first is dark hoary grey, the others lighter; their tips and half of the inner webs next to the shafts, grey, darkest at the tips of the first five—nearly black, less dark in winter; the shafts white; secondaries and tertiaries, dark bluish grey; greater and lesser under wing coverts, white. Tail, pale bluish grey; the shafts of the feathers white, as is the outer feather on each side; upper tail coverts, pale bluish grey; under tail coverts, white; legs and toes, reddish black; the hind toe is lengthened; the claws are long and straight; webs, blackish red.

The female is like the male.

The young are in the earlier stage mottled with brownish grey. In the first year the bill is bluish black; head on the crown, dull white, varied with pale brown and dusky streaks; a spot of greyish black behind the eye; neck and nape, white; chin, throat, and breast, white; back, dull orange brown, spotted with darker brown. Greater and lesser wing coverts, grey, tipped with pale dull orange brown; primaries, grey; tertiaries, dull orange brown, spotted with darker brown; greater and lesser under wing coverts, white. Tail, with not much grey; legs and toes, black.

The engraving is from a drawing by John Gatcombe, Esq., of Plymouth.



SWIFT TERN.

SWIFT TERN.

RÜPPELL'S TERN.

Sterna velox. RÜPPELL.

Sterna—.....? *Velox*—Swift.

THIS species has occurred in Europe, in Hungary; and in Africa is found from the Red Sea to the Cape of Good Hope.

In Ireland one of these birds was shot, as recorded by the late William Thompson, Esq., of Belfast, in the 'Annals and Magazine of Natural History,' at Sutton, near Dublin, in the end of December, 1846, and two others were seen in company with it at the time.

Like all the others of their class, they possess great powers of flight, and their rapid wheelings and turnings are performed with every variety of graceful attitude. It would seem almost paradoxical to attribute superior qualities in this respect to one of these birds over others, where all are so highly gifted, but the name assigned to this Tern would appear to imply that it is 'kat exokën,' the swift one—the swiftest of the swift, where all are swift—the lightest of the light-winged, where all are light-winged.

Male; length, one foot eight inches; bill, yellowish horn-colour. Forehead, white; crown, neck on the back, and nape, black; chin, throat, and breast, white; back, rather dark bluish grey. The wings extend to the end of the longest feathers of the tail; greater and lesser wing coverts, rather dark bluish grey; primaries, secondaries, and tertiaries, grey; greater and lesser under wing coverts, white. Legs and toes, black; webs, black.

LESSER TERN.

LITTLE TERN.

Sterna minuta,	Linnæus. Pennant. Montagu.
" "	Bewick. Fleming. Selby.
" "	Jenyns. Gould.
" *minor,*	Brisson.
" *metopoleucos,*	Gmelin.

Sterna—.....? *Minuta*—Minute—small.

The Little Tern, in Europe, is found on the coasts of Holland, France, Holstein, Denmark, Norway, Sweden, and Russia; also a few in Germany. In America they range from the States to the Gulf of Mexico. In Africa, along the western shores and in the Canary Islands. In Asia, in India, Siberia, and in the neighbourhood of the Black Sea and the Caspian Sea.

This species, 'La Petite Hirondelle-de-Mer,' is common on the coast of Norfolk. In the county of York, specimens have been procured near Huddersfield, at Ecclesfield, near Sheffield, and not unfrequently near Barnsley; also, naturally on the coast. In Cornwall, one was obtained at Mount's Bay, April 16th., 1852. They have been likewise noticed on the coasts of Essex and Suffolk.

It occurs at uncertain intervals, as I have been informed by Mr. Thomas Thorncroft, in the neighbourhood of Shoreham; two were shot by him there in May, 1850; seven or eight appeared in May, 1853, near Brighthampton, Oxfordshire; others near Oxford, two April 23rd., 1853. One was seen by the Revs. Andrew and Henry Matthews, in June, 1846, flying about the margin of the lake in Kirtlington Park, near Weston-on-the-Green. In Cambridgeshire one, a

LESSER TERN.

male, at March, the 7th. of May, 1850. In Surrey, some have occurred at Frensham Pond, near Godalming.

It is seen in Ireland on different parts of the coast.

In Scotland, as far as Aberdeen. In Orkney it is not uncommon.

The Lesser Tern breeds on the Northumbrian coast, nearly opposite to Holy Island. So too in Kent, about Yanlet Islet, on the Thames; in Lincolnshire, at Skegness; and on the Cumberland coast; on the Solway Frith Skinburness is a station; also in Scotland, upon Guillon Point, above North Berwick, on the Frith of Forth.

These birds are found both inland, by the sides of lakes and rivers, and along the sea-coast, frequenting low gravelly and sandy shores.

They arrive early in May, and depart towards the end of August. The migratory journey is performed, it is said, in pairs or small parties, and that both by day and night, high in the air.

They are sociable among themselves, and not shy unless alarmed.

Their flight is similar in its easy and graceful character to that of the other species, and performed with quickly-repeated beatings of the wings; but in stormy weather they appear to be unable to buffet much with the gales, and frequently alight on the ground, generally turning themselves towards the wind.

Their food consists of young fish, shrimps, crabs, insects, and Montagu and Meyer say, some of the smaller sea-weeds. In search of these they frequently alight on the water, besides their habit of descending on their prey.

The note sounds like 'creek, creek,' uttered in a high pitch; but though there is nothing very 'recherché' in the musical performance of this or any other sea-birds, yet to the ear of the naturalist every sound in nature is pleasant and grateful.

The bird before us lays in the sand or gravel along the sea-shore, as also by the borders of rivers: several pairs breed close together.

The eggs are generally two, or sometimes three in number, of a pale brown, dull green, or stone-colour, spotted and speckled with grey and dark chesnut brown. They are laid by the first week in June.

The young are hatched in a fortnight: they are able to

fly about the second week in July. Audubon says that they are fed for a time on the wing by both parents.

Male; weight, a little over two ounces; length, eight inches and a half to nine and a half; the bill, large, strong, and nearly straight, is orange yellow, the tip black or dusky; between it and the eye is a black mark; iris, deep brown, over the eye is a white streak reaching from the forehead. Forehead and head on the sides, white, the former extending farther back in winter; crown, neck on the back, and nape, jet black, less deep in winter; the feathers elongated at the back of the head; chin, throat, and breast, white. Back, pale soft bluish grey.

The wings reach to the extent of one foot seven or eight inches, and extend, when closed, beyond the end of the tail; greater and lesser wing coverts, pale delicate bluish grey; of the primaries, the first one, two, or three are blackish grey, the inner webs broadly edged with white, the others grey. The tail is white, short, and not very much forked; upper and under tail coverts, white. Legs and toes, orange yellow; webs, orange yellow.

The female is as the male.

The young of the year have the bill pale yellowish brown, the tip blackish brown; before and behind the eye is a blackish mark. Forehead, head on the crown, neck on the back, and nape, dull yellowish brown, spotted at the tips of the feathers with blackish grey, the latter colour prevailing on the latter-named parts; chin, throat, and breast, white; back, pale bluish grey, mixed with dull yellowish and barred with dusky black near the tip. Primaries, dark blackish grey, the margins of the inner webs white; secondaries, grey; tertiaries, grey margined with blackish grey. Tail, white at the base, and spotted towards the end, and tipped with dusky yellowish, and with dusky black marks on each web in the middle of the feather. Legs and toes, pale yellowish brown; webs, pale yellowish brown.

BLACK TERN.

BLACK TERN.

Sterna nigra, Linnæus. Fleming. Selby.
" *fissipes*, Montagu. Bewick.
Viralva nigra, Leach. Stephens.

Sterna—.....? *Nigra*—Black.

The present species occurs in Europe in Holland, Sweden, Germany, Italy, Switzerland, Denmark, Hungary, and France. In America, both North and South, from Hudson's Bay to the Brazils. In Asia, in Tartary and Siberia, Persia, and along the Caucasus. It has been noticed also at Madeira.

The Black Tern used to breed in numbers in several of the marshy parts of the country, but the drainage of lands has destroyed many of its haunts. Winterton, in Norfolk, used to be one of these, and Romney Marsh, in Kent. It still finds suitable places in Lincolnshire, Norfolk, and Cambridgeshire. In the former county Crowland Wash was once a resort. In Cambridgeshire, immense flocks of these birds appeared in Bottisham and Swaffham fens, in the summer of 1824, as recorded by the Rev. Leonard Jenyns; a pair were killed at March, the 7th. of May, 1850. In Cornwall, a specimen occurred at Mount's Bay, the beginning of April, 1850. In Sussex, one the same year, at Balmer, near Lewes, on the 9th. of that month. Individuals have occurred in Hampshire, Devonshire, and Shropshire. In Middlesex, some at Kingsbury, in the autumn of 1841. The Black Tern is occasionally plentiful on the Norfolk coast; three or four at Horsey, near Yarmouth, May 17th., 1853. In Yorkshire, a few used to frequent the streams near Driffield, and individuals have occurred near York, Barnsley, Hebden Bridge, and Sheffield, one in the middle of the town; one also at Kirkstall, near Leeds, in the year 1842. In Worcestershire, two near Worcester, on or about the 12th. of November, 1849. Six of

these birds were shot in October, 1849, at Swanpool, Falmouth, Cornwall. A pair at Chertsey, in Surrey, the end of May in the same year; others at Frensham Pond, near Godalming; at Weybridge, one on the 10th. of August, 1841, and one on the 12th. of May, 1842, the latter out of a flock of about twenty. In Oxfordshire this species is occasionally found, generally in immature plumage, but adult specimens have been obtained near Oxford and on Otmoor; two, both adult males, on Port Meadow, near Oxford, in May, 1848; others had been procured there previously. William Felkin, Esq., Junior, of Carrington, near Nottingham, has written me word that a flock were seen near the latter town, on the River Trent, in June, 1851, and one of them shot; and also some others in January, 1854, during the severe snow-storm of that month, at Wilford, near there. Another, Mr. John Shaw informs me, was killed at Wroxeter, on the Severn, in May, 1853. The Hon. T. L. Powys has met with several in Northamptonshire, on the River Nene, near Thrapstone.

In Scotland, one was shot at Coldstream, Berwickshire, the beginning of July, 1851. One had previously been obtained in East Lothian.

In Ireland it occurs as an occasional straggler. Some have been observed by the River Shannon, and Sir William Jardine says there is a breeding-place at Roxburgh, near Middleton, in the county of Cork.

These Terns frequent, for the most part, low and flat watery grounds, morasses, bogs, fens, and pools.

They migrate chiefly by night, flying at a great elevation, but otherwise, if following the course of a river, low down. 'When this bird rests on the ground, it carries its head with the neck shortened, its breast lowered, and its body in a horizontal position, with its wings crossed one over the other, and carried considerably above the tail.' The time of their arrival is in April or the beginning of May, and that of their departure early in October. One was seen by Montagu so late as the beginning of November, 1802.

In Italy, thousands of these birds are sold in the markets for food.

The powers of flight of this species are equally great with those of the others. Flocks have been seen in the middle of the Atlantic Ocean. 'Nil moror' is their motto, in disregard of the longest journey, and distance forms no part of their

calculations in setting out. Meyer says that it has frequently been observed that the Black Tern is so exceedingly quick and dexterous on the wing, that Hawks find it generally difficult, if not impossible, to strike one, and are frequently obliged to give up the pursuit. Montagu was a witness to one such instance, and mentions 'a chase of this bird by a Peregrine Falcon, whose repeated pounces it foiled, and from whom it ultimately escaped, by the dexterity and singular quickness of its manœuvres.' They swim only from necessity, not from choice, and walk or run but little, almost the whole of their time being passed in the air.

They live on insects, dragon-flies and others, small fish, young frogs, and worms. Those articles of food that belong to the water, they dip down at, and so pick up; any on the land, they alight beside for an instant, and then fly off with.

Their call-note is thought to be like the word 'kear, kear,' uttered in a rather soft and plaintive manner.

These birds build together in great numbers; they choose for the purpose swampy places among moors or fens. Their nests are either placed in some slight mound of earth, or tuft of grass or rushes, close to or floated on the water, among the kindred stems and stalks of flags and reeds, and with grass for the inner portion.

The eggs are three in number, and still oftener four, and of a rather dark olive green or olive brown colour, blotted and spotted with deep brown or black, principally at the larger end.

The young are produced in fifteen or sixteen days.

Male; weight, about two ounces and three quarters; length, nine inches and three quarters to ten inches; the bill is flattened at the sides, black and polished, with a tinge of crimson at the base, the inside of the mouth red; iris, dark dusky brown. Head and crown, dark leaden grey, nearly black, in winter white or nearly so, as is the space between the bill and the eye; neck and nape, dark leaden grey, also white in winter; chin, throat, and breast, deep blackish grey in summer, the former white in winter; back, deep slate-colour.

The wings have the first quill feather the longest; they expand to the width of one foot ten inches, and reach, when closed, two inches beyond the end of the tail; the outer web of the first is black, and a narrow pale stripe borders the edge of the inner. Primaries, slate-colour, bordered with a lighter shade on the ends of the inner webs of the two first. Tail, dark slate-colour, not much forked; under tail coverts, white. Legs

and toes, deep reddish brown; the claws, black, long, very sharp, and hollowed underneath; the webs, deep reddish brown, are deeply indented.

In the autumnal moult, preparatory to the winter dress, the plumage appears to be as follows:—The base of the under mandible dark reddish brown; eyelids, white and feathered, the outermost edge black, in front of the eye a black mark. Forehead, crown, neck on the back, nape, head, and neck on the sides, blackish, a band across the front of the head has the black feathers tipped with white; chin and throat, white; the breast, blackish grey on each side. Back, dark hoary greyish brown, the edges of the feathers being yellowish white. Greater and lesser wing coverts, dark hoary grey with a tinge of reddish brown, the shafts white; greater and lesser under wing coverts, white. Tail, pale grey, underneath lighter-coloured, the shafts white; upper tail coverts, pale grey; under tail coverts, white. Legs and toes, bluish grey, with a tinge of pale yellowish or reddish brown.

The female nearly resembles the male; the chin has a few touches of white. The back is of a paler shade of lead-colour.

In the young of the year the bill is brownish black; forehead, white; the neck has a white collar; the chin, throat, and breast, are described as white; back, light slate-colour, the feathers margined with brown or white, or a mixture of both. Primaries, dark slate grey, the first one leaden grey; greater and lesser under wing coverts, white. Tail, slate grey; upper tail coverts, greyish white.

WHITE-WINGED BLACK TERN.

WHITE-WINGED BLACK TERN.

SILVER-WINGED BLACK TERN.

Sterna leucoptera, Schinz. Gould.
" " Temminck. Yarrell.

Sterna—.....? *Leucoptera. Leucos*—White. *Pteron*—A wing.

This bird appertains to the northern parts of Africa, Tunis, and other districts, and the southern parts of Europe, affecting the bays and inlets of the Mediterranean and its islands—Sicily, and others. It is very common about the Straits of Gibraltar, and on the lakes of Switzerland; also in Italy, and is included in the birds of Spain, Norway, Sweden, and Germany. In Asia, it has been noticed on the shores of the Black Sea

One of these birds was shot on the 17th. of May, 1853, at Horsey, near Yarmouth, Norfolk; a 'material guarantee,' it may be hoped, for the future occurrence of others in our country.

In Ireland, one was shot by J. Hill, Esq., on the River Shannon, in the year 1841; one also in Dublin.

They arrive at their summer haunts in the month of May, and disappear in July and August.

They feed on dragon-flies and other winged insects, and the fry of fish.

The eggs of this species are three or four in number, with many greyish spots, and some larger blackish red ones, the ground colour being dull yellowish olive. They are of a rotund form.

The male and female birds sit on them in turn, and shew much anxiety for their safety, flying at and about all intruders.

Male; length, about nine inches, or nine and a half; bill, dusky blackish, with a tinge of red at the base; iris, greyish

black; in winter there is a black crescent-shaped mark. Head, crown, neck, and nape, deep glossy black with a tint of green; in winter spotted with black and pale brown and grey, the feathers being bordered with the latter colours; chin, throat, and breast, black. Back, black, paler lower down, in winter deep bluish grey, black between the shoulders.

The wings have the first quill feather the longest; they expand to the width of two feet and half an inch; and reach about three inches beyond the end of the tail; greater wing coverts, light grey, in winter dark grey, some spotted with black and pale brown and grey, with which the feathers are edged; lesser wing coverts, white, deepening into grey down the wing; of the primaries, the first three or the first four or five, variously according to age, are greyish black with a broad band of white across on the base of the inner webs, the shafts white; the remainder of the primaries are light grey, the tips and the outer web of the first quill darker than the remainder; in winter the primaries are slate-colour, the tips of some of them dull white; secondaries and tertiaries, slate grey, in winter paler—bluish grey; greater and lesser under wing coverts, deep glossy black, but some of them dark grey. Tail, white both above and below; upper and under tail coverts, white. Legs and toes, coral red, in winter orange yellow; claws, black; the webs, which are also red, are very deeply indented.

The female resembles the male.

The moult begins at the end of July or beginning of August, and the plumage is as follows:—Bill, dusky black, dull reddish about the base; the space between it and the eye is white. Head, crown, neck on the back, and nape, white with black tips to the feathers; chin, white; the breast barred with black and white, the feathers being broadly edged with the former colour; back on the upper part, black; tertiaries, darker than in summer. Legs and toes, dull coral red.

NODDY.

NODDY.

BLACK NODDY.

Sterna stolida,	Jenyns. Gould.
Anous stolidus,	Eyton.

Sterna—.....? *Stolida*—Foolish—hebid.

This species is only an occasional and rare wanderer to Europe, but a few specimens have occurred on the French coast. It belongs also to America, being plentiful in Carolina, the Gulf of Mexico, along the coast of Florida, and the West India Islands, Tobago, the Tortugas, the Bahamas, and others. In South America, in Brazil and Cayenne. In India it is seen in the Chinese seas.

In Ireland, two specimens were shot off the coast of Wexford, in the summer of 1840.

They are very tame while engaged with their nests, alighting on the heads of visitors, or suffering a hand to be placed over them while sitting; indeed they appear to permit a close approach at all times, as suggested by their name: who has not read of 'Boobies and Noddies?' who, that is to say, has not read Captain Bligh's ever-memorable voyage in the open boat? who that has read it, does not remember it, and will not remember it with interest as long as he lives? These birds frequently alight at night on the yards of vessels, as if to roost. When taken they bite severely, snapping in a quick manner, and so as to make a sound if the object is missed. They have been seen more than a hundred leagues from land.

They fly in a buoyant and light manner, and swim with ease and grace. 'When about to alight on the water, the Noddy keeps its wings extended upwards, and touches it first with its feet.'

They feed on small fish, on which they either swoop in their flight, and so snatch up, or take while swimming about.

The note is harsh, but they also utter a low querulous murmur.

The nesting-places of this bird are banks and rocks.

The nest, which is placed in low trees or bushes, is made of twigs and dry grass, and that of the former year is often repaired, being thus raised to the height of nearly a couple of feet. Thousands of birds build together.

The eggs, three in number, are of a reddish yellow colour, spotted with dull red and purple. They are thought very good to eat.

The hen bird while sitting is fed by the male.

Male; length, one foot two and a half to one foot three inches; bill, black; iris, dusky brown, a black line runs back to the eye from the base of the bill. Forehead, white, the crown yellowish grey, shaded backwards into greyish brown; neck and nape, dark chocolate brown; chin, throat, and breast, dark chocolate brown. Back, brown; greater and lesser wing coverts, dark chocolate brown; primaries, brownish black; greater and lesser under wing coverts, dark chocolate brown. The tail is rounded, the middle pair of feathers being longer than the others. It is dark chocolate brown in colour; upper and under tail coverts, dark chocolate brown. Legs and toes, black; webs, black.

SABINE'S GULL.

SABINE'S GULL.

SABINE'S XEME.

Larus Sabini,	JENYNS. YARRELL.
" *Sabinei,*	TEMMINCK.
Xema Sabini,	LEACH. EYTON. GOULD.

Larus—.....? *Sabini*—Sabine's, or of Sabine.

THIS neat and graceful bird was first discovered as a new one by Captain Edward Sabine, of the Royal Artillery, who accompanied the expedition of 1818, in search of a north-west passage: they were noticed July 18th. on the coast of Greenland; one subsequently in Prince Regent's Inlet, and afterwards many on Melville Peninsula; also in Felix Harbour, Behring's Straits, Cape Garry, and Igloolik; as also off Newfoundland, and at Halifax, in Nova Scotia. In Europe one on the coast of Holland, one on the Rhine, and one in France, near Rouen. They belong to Spitzbergen.

A specimen of this Gull was shot at Newhaven, in Sussex, in December, 1853. In Cambridgeshire one, and one at Milford Haven, in the autumn of 1839.

It is also an Irish species, the first recorded British example having been shot in the Bay of Belfast, in September, 1822; a second occurred in Dublin Bay; and a third in October, 1837; which fell to the gun of H. H. Dombrain, Esq.

They feed on marine insects, which they stand and watch and search for by the water's edge.

If the nesting-places of these Gulls be approached, they dash with impetuosity at and about an intruder, in the endeavour to scare or lure him away. Most birds, as has already been so often shewn in the present work, resort to every expedient for this object, if not in the way of attack, in that of concealment;—a harmless 'suppressio veri,' which if

the attempt sometimes fails, in far more cases successfully hides from the enemy the situation of the eggs or young.

This bird lays its eggs on the bare earth.

They are two or three in number, olive brown in their ground colour, numerously spotted with darker brown. They are of a regular shape, and not much pointed.

The young are hatched in the latter end of July.

Male; length, one foot and nearly an inch; bill, black tipped with yellow, the inside of the mouth bright vermilion; iris, dark brown surrounded by a rim of vermilion red: under the eye is a small white speck. Head, crown, neck on the back, sides, and front, dark slate-colour, below which is a collar of deep black, followed by the white o the lower part of the neck and nap chin and throat, dark slate-colour; breast, white; back, pale bluish grey.

The wings extend rather more than an nch beyond the end of the tail; greater and lesser wing coverts, bluish grey; the first five primaries are black, tipped and edged on the inner webs, nearly to, and sometimes quite to, the tips, with white, namely, the first and second black or white at the ends; the third, fourth, and fifth white; the sixth with a white shaft, having the web more or less black, but principally white, with sometimes a black spot near the end, the other primaries white, the shafts black; secondaries and tertiaries, white; greater and lesser under wing coverts, white. Tail, white; the feathers twelve in number, the outer ones narrower than the centre ones, and about an inch longer, upper and under tail coverts, white. The legs, feathered nearly to the knee, and the toes, black; claws, black.

The young, in the autumn the first ear nas the bill black at the base, the tip yellowish white; the space between the eye and the bill, excepting a narrow line of greyish black around the lower part and in front of the eye, is white; forehead, white crown, mottled with blackish grey; neck on the sides, white nape, darker blackish grey, shaded off into the other tint; chin and throat, white; breast above, pale grey white; back, blackish grey tinged with yellowish brown, the extremity of every feather varying from greyish white to white as it approaches the tail. Greater and lesser wing coverts, blackish grey tinged with yellowish brown, broadly tipped with white the first five primaries have the shafts brownish black at the base, becoming gradually darker towards their ends, which in the first three are black tipped with dull white, but

in the fourth, fifth, and sixth, assimilate to the feather at that part, which is white; the whole of the outer webs of the first five black, the inner webs with a broad edging of dull white to within from one to two inches of the end; in the sixth the inner web is dull white, the outer black, excepting for about a quarter of an inch from the tip, where it is white, and again at about an inch from the end, where a white oval-shaped spot appears; (the above description is compiled from Mr. Thompson's, of Belfast.) Secondaries, broadly tipped with white; tertiaries, grey; greater and lesser under wing coverts, white. The tail, less forked than in the full-grown bird, is dull white, the tip black; upper and under tail coverts, white. Legs and toes, black; webs black.

ROSS'S GULL.

ROSS'S ROSY GULL. CUNEATE-TAILED GULL.
WEDGE-TAILED GULL.

Larus Rossii,	Richardson. Nuttall. Audubon.
" "	Macgillivray. Yarrell. Wilson.
" *roseus,*	Jardine. Selby
Rhodostethia Rossi,	Macgillivray.

Larus—..... *Rossii*—Of Ross.

This species is named after Commander Ross, R.N., by whom the first specimen was obtained. Two were shot on the coast of Melville Island, during Sir Edward Parry's second expedition. Several were seen north of Spitzbergen, and the species was also noticed by Lieutenant Forster, R.N., in Waygait Straits.

A specimen of this beautiful Gull was shot in Yorkshire, by Lord Howden's gamekeeper, in February, 1847, at Milford-cum-Kirby, near Tadcaster, in the West-Riding. Another is reported in the 'Zoologist,' page 3388, on the authority of Mr. J. B. Ellman, to have been obtained at Pevensey, in Sussex, in the beginning of 1852.

Length, about one foot two inches; the male in winter has the bill black, the inside o the mouth reddish orange; the edges of the eyelids reddish orange; near and around the eye are small black feathers; head and crown, white; the neck has a collar round it of pitch black, it is otherwise white, as well as the nape, chin, throat, and breast, the latter with some grey and a deep tinge of 'rich and rare' peach-blossom, red or rose-colour—borrowed, as it were, in the hyperborean regions, the native places of the bird, from the 'Aurora Borealis,' the 'Northern Light,' which, as if to make up for the brief day, transplants the gleam of the morning to gild the long night of the Arctic year. Back, clear grey.

ROSS'S GULL.

The wings reach an inch beyond the end of the tail; underneath they are grey; the fifth quill feather is the longest; greater and lesser wing coverts, grey; the primaries have the outer web of the first blackish brown or dark grey to its tip, which is grey, the shaft bluish grey, the others white; greater and lesser under wing coverts, grey. The tail, which is wedge-shaped, has the outer web of the first feather blackish; the remainder rose-colour; the two middle feathers are the longest, the others graduated; upper tail coverts, delicate rose-colour. Legs and toes, vermilion red; claws, blackish or black; webs, vermilion red.

LITTLE GULL.

Larus minutus,	Montagu. Bewick.
" *atricilloides*,	Gmelin. Fleming. Selby.
" "	Jenyns. Latham. Temminck.
Chroiocephalus minutus,	Eyton.
Xema minutus,	Gould.

Larus—.....? *Minutus*—Minute—small.

This diminutive and elegant species occurs in Europe in Russia, Finland, and Denmark, and individual specimens have been obtained in Holland, Hungary, Italy, Germany, and Switzerland. In Asia—in Tartary and Siberia, and about the Caspian Sea and the Black Sea. In America a young bird appears to have been seen.

In Yorkshire, two were seen about the 20th. of October, 1849, and one of them shot, at Auburn House, near Burlington Quay, by Mr. Jones, of the latter place; several others near there also at different times; another near Redcar, January 16th., 1850; one at Scarborough by Mr. Patrick Hawkridge, in November, 1836; two were seen on Skipworth Common, September 1st., 1856. A specimen of the Little Gull was shot at Yarmouth, in Norfolk, on May 30th., 1849; others have occurred, though rarely, most years; one was killed in the middle of November, 1843, within the city of Norwich. In Suffolk, one in 1832. In Northumberland, one at the mouth of the Tyne, in September, 1835. One, in adult plumage, near Lewes, Sussex, the 29th. of November, 1850. In Somersetshire one near Weston-super-Mare, January 7th., 1851; it also was a mature specimen. In Derbyshire, one, a young bird of the year, in the parish of King's Newton, the 22nd. of January, 1851, by H. Orton, Esq.; when first seen, it was swimming in the Trent, near Weston Cliff. One in Devonshire, near Exeter, the last day of January, 1851.

LITTLE GULL.

In Cornwall, two shot at Swanpool, Falmouth, by T. Passingham, Esq., January, 1847; and in the same month another was captured at Ponsnooth. In Essex one. One, a young bird, near London, at Chelsea. One in Kent, at Sheerness, in 1840, Mr. Chaffey, of Dodington, has informed me. Mr. Bullock obtained two specimens in 1819.

In Scotland, one on the Firth of Clyde; also one on the Solway Firth, in the autumn of the year 1824. In Shetland one, a female, was shot by Mr. Robert Dunn, on the 7th. of April, 1853.

It has occurred in Ireland, but only very rarely; two were seen, and one of them obtained, in the Bay of Belfast, in December, 1847; another on the Shannon—an adult bird in summer plumage.

They frequent the mouths of rivers, lakes, and ponds.

They are migratory in their habits.

These birds seem to associate with the Terns; and are shy, and difficult to be approached.

This Gull flies in a peculiarly swift and airy manner, 'à la' the Sea Swallow, one while hovering over a spot that contains, or seems to contain, some article of food, now wheeling about in graceful sweeps, and now soaring aloft to a great height in spiral movements, and away the sea-fowl hies to the place of its nightly rest.

They feed on insects, worms, caterpillars, and the young fry of fish.

Male; length, a little over ten inches; bill, bright red, in winter reddish black or brown; iris, very dark brown; behind the eye is a small crescent-shaped spot of white; in winter a small triangular black one before it. Head on the back, crown, and the neck all round, deep black, in winter brownish grey black; below white; in winter the forehead is white, the back of the head and nape white, streaked with more or less of greyish black; the sides white; the chin, throat, and upper part of the back, white; a dusky spot under the eye, and an oblong patch of dusky black rather behind it, going downwards; chin and throat, deep brownish black, in winter white; breast, white, tinted with rose-colour; back on the upper part, clear pale grey, coming forwards on the sides towards the breast; below white.

The wings have the first two quill feathers of nearly equal length; they reach about an inch and a half beyond the end of the tail; greater and lesser wing coverts, mottled with

greyish black, and several slightly tipped with white; the first primary is black on the outer web, except at the base and tip, the others are dark greyish black, the tips and inner margins of the webs white, gradually increased from the first, which, as just said, has only a small speck of that colour at the end; secondaries, pale bluish grey on the outer webs, edged with dusky black towards the base, the inner webs white, and the tips also white, with more or less black towards the point close to the shaft; tertiaries, mostly greyish black, slightly edged with white at the tips; greater and lesser under wing coverts, grey in winter. The tail, white, is quite square at the end, and the extremities of the feathers black; upper and under tail coverts, white. The legs, which are feathered nearly to the knee, and the toes, bright vermilion red; the inner one considerably shorter than the others, the middle one rather longer than the outer; webs, bright red.

In the young bird, towards the close of the first year, the bill is black; forehead and crown, white, tinged with grey, in winter white; head on the sides and back, greyish black; neck on the back, sides, and nape, blackish grey, tinged with brown, the edges of the feathers fringed with greyish white, in winter white; chin, throat, and breast, white; back, pale brownish grey, a few blackish brown feathers interspersed.

Greater wing coverts, grey, deeply margined with white; lesser wing coverts, brownish black, edged with grey; the first four primaries, greyish black on the outer webs and tips, in winter tipped with white; the inner webs greyish white, in winter nearly entirely white; secondaries, greyish black, tipped with white; greater and lesser under wing coverts, white. Tail, white, broadly tipped with black, widest on the middle part; it is slightly hollowed in shape; the outermost feather on each side entirely white; underneath, the other feathers are white, with a narrow margin of greyish black; upper and under tail coverts, white. Legs and toes, pale dull yellowish red.

BUONAPARTE'S GULL.

BUONAPARTE'S GULL.

BUONAPARTIAN GULL.

Larus Buonapartii, THOMPSON. AUDUBON.

Larus—.....? *Buonapartii*—Of Buonaparte.

IF I was writing a history of France, or rather a history of the World, instead of a History of British Birds, I might here enlarge, were my pen able to do equal justice to the subject with the pencil of Landseer, on the contrast between 'Peace' and 'War,' the name of Buonaparte suggesting to the eye of the mind a picture, which not even the touch of that greatest of painters, ancient or modern, can equally convey to it. Whether 'True Greatness' is most and best exhibited in the life of the Prince, or in that of the Emperor, in the man of science, or the man of the sword, whether the study of all GOD'S creatures for one's own instruction and that of others, or the wholesale destruction of the last-made and best of them all, for the sake of self alone, is most for the glory of GOD or the good of man, I hope, I know, that even my writings have largely assisted to spread in my country a right spirit, which will enable many to return the true answer to the question, and to make it tell so far with practical effect.

The present species, named after the Prince of Canino, Charles Lucien Buonaparte, the eminent naturalist, has in America been noticed in different parts of the Union, and throughout the Fur Countries in abundance, in Chesapeake Bay, Passamaquody Harbour, Charleston Harbour, and about the Great Slave Lake.

In Scotland, a specimen was shot by Sir George H. Leith, on the shore of Loch Lomond, in Dumbartonshire, the end of April, 1850.

In Ireland, one of these Gulls was killed on the River Lagan, near Belfast, on the 1st. of February, 1848, and the Hon. T. L. Powys has favoured me with information of another having been shot by a brother officer of his, near Skerries, north of Dublin, C. W. Watkins, Esq., of Badby House, Northamptonshire, who writes me word that this occurred in the winter of 1855-6, namely, February 14th. He shot it himself, and has very obligingly forwarded the specimen for the use of this work.

These birds congregate in large flocks, and that so closely together, that Audubon mentions his son's having shot seventeen at a single discharge, so to speak, of a double-barrelled gun. They associate with the Terns. They are peculiarly tame and gentle in their habits.

They feed on shrimps and other crustacea, and fish—the shad and old wife among others, beetles and other insects, and portions of plants.

The note is described as shrill and plaintive.

Male; length, one foot three inches to one foot three inches and a half; bill, shining black, the inside of the mouth bright carmine red; iris, dark brown. Head on the crown and all over, greyish black, in winter white, except an oblong mark behind the eye on the side of the head, and a little of the same colour before, below, and above the eye, and a spot on the side of the head. Neck on the back and nape, greyish black, in winter blackish mixed with white; chin and throat, greyish black, in winter white; breast, white, with a faint roseate tinge; back, pale bluish grey. Lesser wing coverts, in winter bluish grey with brown markings; of the primaries, the first has the outer margin black, the second black on the end portion, the inner part white, the third less so in the same way, and least on the outer margin. The others terminated with brownish black, except at the extreme tip, 'on the third the first indication of white appears in a mere line of that colour; thence it becomes gradually larger in size and deeper in shade to the seventh, when it assumes the pearl grey of the lower portion of the same feather The black becomes more and more tinged with brow from the first primary to the last; the light-coloured tip, on the contrary, becomes gradually of a deeper shade from the third to the last Shafts of all the primaries white, except the upper portion of the first, which is dusky. Black appears on the inner web of the three longest primaries, much lessening both in length and breadth from the first to the third.' Underneath, the quills are white, except

below the black parts, where they are grey. The secondaries are blackish brown towards the tip within the grey margins; the tertiaries have more or less of blackish brown irregularly disposed towards their tips; greater and lesser under wing coverts, white. Tail, white, with a band of black near the tip; upper tail coverts, white. Legs and toes, bright carmine red.

The female is a little smaller than the male, length, one foot two inches.

The young bird, in the first year, has the bill brownish, pale at the base underneath; head, crown, neck on the back, and nape, greyish brown, with paler tips to the feathers; throat and breast on the upper part, white, faintly tinged with buff. Tertiaries, blackish brown, the tips paler. Legs and toes, pale yellowish brown.

MASKED GULL.

BROWN-HEADED GULL.

Larus capistratus, FLEMING. JENYNS. TEMMINCK.
Chroicephalus capistratus, EYTON.

Larus—.....? *Capistratus*. *Capistrum*—A halter, or headstall.

WE are chiefly indebted to continental naturalists for particulars respecting this species.

It belongs to North America, and is found in Baffin's Bay and Davis Straits.

In Europe specimens have been procured in Italy, one in Liguria, in the collection of the Marquis Durazzo. In Spain too, it is said to occur.

In Berkshire, one in immature plumage was obtained near Newbury; another, also a young bird, near Sandsfield, in Cumberland, on the 6th. of June, 1833. One near Nottingham, in January, 1854, of which William Felkin, Esq., Jun., has informed me; one by J. A. Drake, Esq., of Magdalen Hall, Oxford, at Ashford, Kent, in the summer of 1853. He saw another at the same time. In Suffolk, one at Aldborough, in the early part of April, 1848; in Westmoreland, one was captured near Kendal, the latter end of November, 1841. It had alighted on the back of a sheep, and having got its feet entangled among the wool, was injured by some means during an effort to rise, and being disabled for a moment, fell to the ground, and was quickly picked up by a boy. Another, a mature bird, was caught off Brighton, Sussex, on the 25th. of February, 1853.

In Ireland it has occurred, but is extremely rare. One was shot in the neighbourhood of Belfast.

MASKED GULL.

In Wales, T. C. Eyton, Esq., of Eyton, has recorded one shot near Bangor.

In the Orkneys two individuals of this species were taken at Westray; another in 1831. In Shetland one in 1831.

They have been known to breed in Orkney.

These birds appear to be easily kept in confinement.

In their flight they exhibit the 'esprit de corps' of the rest of their family, and wing their way with characteristic ease and grace.

The eggs are described as of a greyish green colour with dark spots.

Male; weight, eight ounces and a quarter; length, one foot two to one foot three inches; bill, brownish red. The dark colour, that is to say, the blackish red brown on the head, the lower part the darkest, is in front only, somewhat in the way of a mask, and hence the name of the bird. In winter the dark colour is lost, all but a few dusky grey lines and a small dusky black patch under, and another behind the eye. Crown, dark-coloured in front, the hind part white, as is the neck on the back, and the nape. Chin, blackish brown; throat, blackish brown, mixing with the white of the breast; back, pale bluish grey. The wings expand to the width of two feet eleven inches or three feet; greater and lesser wing coverts, bluish grey; the first primary is white tipped with black, a black line on the middle of the outer web, and a greyish black border along the margin of the inner web, being broadest at the base, the second and third without the black line on the outer web; the fourth and fifth have a greater portion of greyish black on the inner web, and all of them except the first, with their extreme tips white, the shafts white adjoining the white colour. Tertiaries, pale bluish grey, passing into white on the tips; greater and lesser under wing coverts, greyish white. Tail, white; under tail coverts, white. Legs and toes, reddish brown.

BLACK-HEADED GULL.

BROWN-HEADED GULL. BROWN GULL. LAUGHING GULL.
RED-LEGGED GULL. PEEWIT GULL.
SEA CROW. BLACK-CAP. HOODED MEW. PICKMIRE.

Larus ridibundus,	Pennant. Montagu. Fleming.
" *procellosus,*	Bechstein. Selby. Jenyns. Bewick.
" *erythropus,*	Montagu. Gmelin.
" *cinerarius,*	Bewick.
Xema ridibundus,	Gould.

Larus—.....? *Ridibundus. Rideo*—To laugh; in allusion to one of the vernacular names of the bird.

This graceful and lively bird is well known in many parts of the world. In Europe, it is a native of Russia, Sweden, Holland, France, Germany, Italy, and Switzerland. In Asia, of Siberia, Syria, Armenia, and Arabia. In America, of Greenland and the shores of Baffin's Bay and Davis Straits. In Africa, it is found in Egypt and along the northern shores.

Many things, and many words expressive or descriptive of things, seem strange when first observed or first heard, but use soon reconciles the eye, the ear, or the mind to them, and they quickly lose their novelty, and are then no longer thought of or remarked. In 'Barring Out' the name of Archers, the partizans of Archer, seems almost a matter of course; the Greybeards, the followers of De Grey, soon appear equally as it were of necessity so designated; but Fisher's 'Why not! I and my nine Fishermen' being later in the field, jars upon the ear at first, and seems for a time to want the 'prestige' which the others have. Thus a Rookery is to all an accustomed word, but to some a Gullery is not. The reason just touched upon is, however, the only one why both are not 'Familiar

BLACK-HEADED GULL.

in our ears as household words,' the one as much so as the other: there are several Gulleries, places so called where these Gulls breed, and I proceed to enumerate the principal of them.

A famous resort for these birds is Twigmoor, near Glandford Brigg, in Lincolnshire, the estate of Sir John Nelthorpe, Bart., where as many as from ten to twenty thousand may be seen in the breeding-season.

Dr. Plot, in his History of Staffordshire, gives a curious, not to say strange or marvellous, account of their annual visit to that county, for a copy of which, as follows, I am indebted to Thomas George Bonney, Esq., of Churchdale House, near Rugeley:—

'But the strangest whole-footed water-fowle that frequents this county is the 'Larus cinereus,' Ornithologi, the 'Larus cinereus tertius,' Aldrovandi, and the 'Cepphus' of Gesner and Turner; in some counties called the Black-cap, in others the Sea or Mire Crow; here the Pewit; which being of the migratory kind, come annually to certain pooles in the estate of the Right Worshipfull Sir Charles Skrymsher, Knight, to build and breed, and to no other estate in or neer the county, but of this family, to which they have belonged 'ultra hominum memoriam,' and never moved from it, though they have changed their station often. They anciently came to the old Pewit poole above mentioned, about half a mile S.W. of Norbury Church, but it being their strange quality (as the whole family will tell you, to whom I refere the reader for the following relation) to be disturbed and remove upon the death of the head of the family, as they did within memory, upon the death of James Skrymsher, Esq., to Offley Moss, near Woods Eves, which Moss, though containing two gentlemen's land, yet (which is very remarkable) the Pewits did disern betwixt the one and the other, and build only on the land of the next heir, John Skrymsher, Esq., so wholy are they addicted to this family.

At which Moss they continued about three years, and then removed to the old Pewit poole again, where they continued to the death of the late said John Skrymsher, Esq., which happening on the eve to our Lady day, the very time when they are laying their eggs, yet so concerned were they at this gentleman's death, that notwithstanding this tye of the Law of Nature, which has ever been held to be universal and perpetual, they left their nest and eggs; and though they made some attempts of laying again at Offley Moss, yet they

were still so disturbed that they bred not at all that year. The next year after they went to Aqualat, to another gentleman's estate of the same family, (where though tempted to stay with all the care imaginable,) yet continued there but two years, and then returned again to another poole of the next heir of John Skrymsher, deceased, called Shebben poole, in the Parish of High Offley, where they continue to this day, and seem to be the propriety, as I may say, (though a wild-fowle,) of the Right Worshipfull Sir Charles Skrymsher, Knight, their present Lord and Master.

But being of the migratory kind their first appearance is not till about the latter end of February, and then in number scarce above six, which come, as it were, as harbingers to the rest, to see whether the hafts or islands in the pooles, (upon which they build their nests,) be prepared for them, but these never so much as lighten, but fly over the poole, scarce staying an hour; about the sixth of March following there comes a pretty considerable flight, of a hundred or more, and then they alight on the hafts, and stay all day, but are gone again at night. About our Lady day or sooner, in a forward spring, they come to stay for good, otherwise not till the beginning of April, when they build their nests, which they make not of sticks, but of leaves and rushes, making them but shallow, and laying generally but four eggs, three and five more rarely, which are about the bigness of a small hen's egg.

The hafts or islands are prepared for them between Michlemas and Christmas, by cutting down the reeds and rushes, and pulling them aside in the nooks and corners of the hafts, and in the valleys, to make them level, for should they be permitted to rot on the islands the Pewits would not endure them. After three weeks' sitting the young ones are hatched, and about a month after are ready to flye, which usually happens on the third of June, when the proprietor of the poole orders them to be driven and catch'd, the Gentry comeing in from all parts to see the sport; the manner thus,—they pitch a rabbit-net on the bank side, in the most convenient place over against the hafts, the net in the middle being about ten yards from the side, but close at the ends in the manner of a bow; then six or seven men wade into the poole beyond the Pewits over against the net, with long staves, and drive them from the hafts, whence they all swim to the bank side, and landing, run like Lapwings into the net, where people standing ready, take them up and put them into two penns made within the

bow of the net, which are built round, about three yards diameter and a yard length or somewhat better, with small stakes driven into the ground in a circle, and interwoven with broom and other raddle.

In which manner there have been taken of them in one morning fifty dozens at a driving.

But they commonly appoint three days of driving them, within fourteen days or thereabouts of the 2nd. and 3rd. of June, which while they are doing, some have observed a certain old one that seems to be somewhat more concerned than the rest, being clamorus, and striking down upon the very heads of the men; which has given ground of suspicion that they have some government among them, and that this is their prince, who is so much concerned for its subjects. And it is further observed that when there is great plenty of them the lent corn is so much the better, and the cow pasture too, by reason they pick up all the worms and the 'Tern Flyes.''

Scoulton Mere, near East Dereham, in Norfolk, the property of Major Wayland, is another breeding-haunt; as many as thirty thousand eggs are taken every year, and in one season as many as forty-four thousand were the produce. Rollesby Broad, near Yarmouth, in the same county, is also a great resort, as are others of the Broads; and the birds are seen along the coast. In Cambridgeshire, they used to frequent the fens, in some seasons in great plenty.

In Yorkshire, a great breeding-place for these Gulls is on Hornsea Mere. They used to frequent Thorne Moor. They occur along the sea-shore, and individuals have been seen near Wakefield and Huddersfield.

Many hundreds breed near the mouth of the Thames, both on the Essex and the Kentish side, finding suitable situations on the low islands near the banks, and the marshes of the mainland.

Another interesting Gullery is on a lake in front of Pallinsburn Hall, Northumberland, the ancient seat of the Askews, of which family was the never-to-be-forgotten Dame Anne Askew, the martyr, of 'glorious, pious, and immortal memory.' My cousin, Mrs. John Hincks, of Cowling Hall, near Bedale, being related to the Pallinsburn family, I requested her to obtain for me all the information on the subject she could, and her sister, Miss Pulleine, being on a visit there at the tim or shortly

after, the following letters from Mr. Selby, and Mr. Mason the agent, are the result:

'Twizell House, March 12th., 1856.

Dear Miss Pulleine.—My daughter, Mrs. Luard, has intimated to me your wish to obtain for Mr. Morris, who is engaged in a work on British Ornithology, an answer to some queries respecting the Gull which resorts during the breeding-season to the pond at Pallinsburn. The bird in question belongs to the family of the 'Laridæ,' and to the genus 'Larus.' It is the 'Larus ridibundus' of Linnæus, and is known by the provincial names of the Laughing Gull, Peewit Gull, Black-cap Gull, Pickmire, etc. During the autumn and winter it is common on the coast, but destitute of the black head, which it assumes periodically, as in many of the Terns and lesser Gulls, immediately previous to departure for its breeding-quarters. By the middle of March the great body that annually resorts to the pond at Pallinsburn have made their appearance there, and are soon engaged in the cares of incubation, and by the end of July have again departed with their young to the sea coast, the black hood being thrown off, and the head white, with the exception of a few grey spots behind the ears. As to number, they may be reckoned in thousands, and of late years colonies have been thrown off, which resort to ponds at Dunse Castle and at Paston, near Yetholme. I can trace them to have resorted to Pallinsburn for upwards of a hundred years, and probably their first appearance was at a much earlier period. Any further information you may wish I shall, if able, be happy to supply, and

I am, with respect,
Yours truly,
P. I. Selby.'

'Pallinsburn Cottage, Wooler, March 18th., 1856.

Madam,—Miss Pulleine, when here a week or two ago, requested me to furnish you with some particulars relative to the Gulls which annually visit our pond at Pallinsburn. This I would have done sooner, but amongst other queries contained in a paper she gave me, was one asking the ornithological name of the birds. This I have been unable to make out,

at least satisfactorily; they have several local names, such as Pick or Pit Birnet, Sea Maws, Sea Swallows, etc., but how far these bear upon their proper denomination, I have found no one sufficiently versed in the natural history of birds in this neighbourhood to determine.

Whatever may be their proper name, it is, I believe admitted that they first came to Pallinsburn above eighty years ago, at a time when a large bog or lake, something similar to our own, was drained near the town of Kelso; how long they had previously been known to visit there, I have heard no one say.

An impression, though an erroneous one, has generally prevailed, that they are so regular in their migrations as to come and leave on a given day. Now, although so constant in their habits year after year, such is not the fact, as I have known them vary as much as two weeks. The real state of the case is, that their arrival depends entirely on the state of the weather about the end of the month of February. If that month is fine and open, they begin in small numbers to hover about, in the neighbourhood of the pond, by about the 20th.; they increase in numbers daily, each day drawing nearer to it; in the course of a week they alight on the water for about an hour in the forenoon, then stay on it, also increasing perhaps an hour or two every day, until, if the spring continues fine, about the end of the first week in March they finally remain all night, and may be then said to be permanently located for the season. This is, however, not always so. I remember, about ten or twelve years ago, after having begun to build their nests, a severe snow-storm came on, and they at once went away for a week or two, and we almost imagined they had forsaken the pond, but the very first fresh morning that dawned, even before the snow had disappeared, they were there as busy as ever.

Their nests are of course built on the little islands in the pond, which are grown over with reeds and bulrushes, and are made merely of little pieces of stick or straw, being similar to that of the Plover in a field. Their eggs also most closely resemble those of that bird, both in number, colour, shape, and taste, being highly prized by some people for their eating. The young ones, as soon as hatched, take to the water, where they are to be seen in thousands, and the sight at that time of the year is most interesting. As they begin to take

wing, they follow the parent birds to the fields in search of food, which entirely consists of worms and grubs of every description, so that I have no hesitation in saying the benefit those birds do to the surrounding neighbourhood is immense.

The colour of one of the birds in full plumage is a white body, light grey wings, and a black head. The young ones are quite mixed with brown, with no black head; and I observe when they first return in the spring of the year, that nearly half the birds have white heads, which gradually turn black while they stay. This leads me to the conclusion that they do not get the black head until about a year old.

The period of their departure is spread over most part of the month of July, according as each pair has been soon or late in hatching and rearing its young. Some solitary birds may be found in the month of August, but these are the product of such as have had their first nests destroyed, and hatched a second time, and are almost certain to become a prey to Hawks, etc. It is impossible to estimate their number, but some idea may be formed from the fact that the lake is seven acres, one rood, and twenty-four perches in extent, which is covered as thick, when they are disturbed and on the wing, as if a shower of snow were falling on it, while they are so tame that they take not the slightest heed to the continual traffic on the turnpike-road, which passes them within six yards of the edge of the water.

I think I have given you all the information I can relative to these interesting visitors of Mr. Askew. There is one other place in the neighbourhood called Paston Lake, to which they resort, but I think not in such numbers as 'Askew's Hens' collect; but, bearing on the subject, I will take the liberty of enclosing a copy of some verses which a cottager in our village here, called W. Robson, gave me the other day. I may state, as the lines shew, that the composer is quite illiterate, but withal a turn about him for poetry; and with the hope that the poor attempt I have made to meet your wishes, and to shew the habits of what this neighbourhood is so justly proud of may answer your purpose,

I have the honour to be, Madam,
Your very obedient Servant,
THOS. MASON.

To Mrs. Hincks.'

ON SPRING,
ON SEEING THE GULLS RETURN TO PALLINSBURN LAKE, NORTHUMBERLAND.

This day with joy my heart doth beat—
An emblem of the spring's return
I saw by General Askew's* seat,
The bonny House of Pallinsburn.

A pool is there, some acres wide,
Enclosed by trees, with water full;
And, swarming on the rippling tide,
We see the little cawing Gull.

The sixth of March we see them come,
Although at nights they do not stay,
Till floods subside and give them room
Where they may on the islands lay.

We see them soaring o'er our head,
We see them sailing on the lake,
Or following close the ploughman's tread,
The little creeping worms to take.

For five long months we see them stay,
But when the yellow leaves appear,
They take their wings and flee away—
An emblem of the fading year.

But here I do my rhyme forsake
Should poets view the scene,
Some better verses they may make
About the Gulls at yonder lake,
And fields and forests green. WILLIAM ROBSON.

The Black-headed Gull occasionally visits Oxfordshire, singly or in parties of three or four. In Cornwall, they are not uncommon at Penryn river. In Surrey, the species has occurred at Godalming. In Northumberland, at Prestwick Carr, near Newcastle.

In Scotland, there are large colonies on the islets in Loch Lomond, and several of the Lochs of Sutherlandshire. The same in the Hebrides. In Orkney some breed about the Loch of Stenness, in Sanday, and other localities there.

In Ireland, it is also a constant resident.

In Wales, also, in Carmarthenshire and Glamorganshire especially about the mouths of rivers.

In spring and summer these birds dwell by marshes, rivers,

* Sir Henry Askew

lakes, and ponds, and for the remainder of the year resort to the sea-shore and the mouths of the larger rivers.

They arrive at their summer quarters generally in the month of March, but some about the middle or latter end of February, and leave again the end of July or beginning of August. Many must leave the country in the autumn, and return again in the spring, the numbers of those seen in the latter seasons and the summer being so very great.

These birds are easily kept in confinement in suitable places, such as walled gardens, but continue shy and timid. T. E. Wilkinson, Esq., of Walsham Hall, has written me word of his having kept one of them alive and well for nearly a year, and it was at last killed by a dog, having unfortunately wandered out of its bounds.

They may be seen at times perched on low bushes, the top of a boat-house, or the upright stump of a tree, in the places where they build.

The young were formerly considered good eating, and some proprietors used to make from fifty to eighty pounds a year by their sale.

Their flight is easy, noiseless, and buoyant, and they sometimes hover for a short time over their prey, and then dash on it into the water. They do not usually resort to swimming. On the land they run about in a light and graceful manner.

They frequently hunt for insects in the twilight, and have been seen so late as between nine and ten o'clock at night, and heard returning from their forage at still later hours. In winter they become very shy.

They feed on small fish and insects—cockchaffers, May-flies, beetles, and moths; as also on slugs, worms, shrimps, butts, and other crustacea, and, if need be, on water-plants. The first-named, if of the fresh-water kinds, they hawk for at a height of ten or twelve feet in the air, and on descrying the object, they lower their course, and, skimming the surface, pick it up. They almost always follow the course of the stream, and in winter advance up rivers in the morning, going downwards again towards night. In the spring months they resort to ploughed lands, following the plough in quest of worms and insects; and in summer repair to water. 'During the heat of the day, many of them disperse up and down throughout the corn, pasture, and fallow fields, in search of food. These they beat with great diligence, traversing them again and again, at a height of about ten feet as before.

When any suitable object meets their eye, they immediately round to, alight on the ground, and generally keeping their wings extended upwards, seize it.' The ghost-moth is a favourite object of pursuit on the still summer evenings, when it hovers over the grass or swarms about trees.

'It is indeed a most amusing and interesting sight to witness the elegant evolutions of these beautiful birds when in pursuit of these large moths, oftentimes brushing the surface of the ground with their downy breasts, and generally capturing with facility the moth as it hovers at a distance of from one to two feet from the earth. Occasionally, however, the bird misses its aim, and the moth, by the rapid motion of the Gull, is struck to the ground. The bird, however, nothing dismayed, hovers for a few seconds over the retreat of its fallen prey, and if it perceives it embedded in the grass, pounces upon it, or if disappointed flies off in search of another prize.' May-flies also they course after over the streams almost like Swallows.

The same writer from whom I have made the above quotation, Mr. Archibald Jerdon, adds, in the 'Zoologist,' page 246, 'I have repeatedly seen numbers of them flying about long after sunset, and lately I have remarked that they come abroad in the evening apparently for the purpose of catching insects, which they do on the wing, after the manner of the Swallow tribe. On the 22nd. of this month, I watched the proceedings of a number of these birds by the banks of the Jed, between nine and ten o'clock. There was a small grove of trees at a short distance from the river, to which some of them resorted, flying from one extremity to the other, and returning again, all the while seemingly engaged in the pursuit of insects of some kind. Their motions were much the same as those of Swallows, although somewhat slower; they sometimes remained hovering and suspended while catching an insect, so long and so near the trees, that I thought they were going to alight. Others of them scoured the fields and the water-side, and others again followed the course of the river; but all apparently intent on the capture of some winged prey.'

The note is a hoarse cackle, 'cack, cack, cack, cack,' which has been likened to a laugh, from whence one of the trivial names of the bird. Where large numbers dwell together a great din is produced.

They are very anxious about their young, and stoop and dash at an intruder again and again. As soon as the brood

are able to fly, they scatter about the neighbourhood, to feed on moist meadows and such places; whence they are shortly conducted by their parents to the nearest coast.

This pretty-looking bird resorts to fenny districts and the sides of pools and inland waters and their islands to breed, and vast multitudes congregate together for the purpose, as well both near the sea as farther from it, and on the lands adjoining the sea itself, if low and marshy.

The nest is flat, and a composition of grass or the tops of reeds and sedge, placed, perhaps, on a tuft of rushes or other such herbage.

If the first set of eggs be taken a second is laid, and a third if the second, but in such cases they are less each time in size. They are valued as food, and in some places are farmed for the purpose.

The eggs, two, three, or sometimes, it is said, four in number, are laid the middle or end of April, or beginning of May, chiefly at the latter season, and are hatched the end of May or early in June. They vary exceedingly in colour and markings; some are light blue, others yellow, and others green, red, or brown. Some have scarcely any spots, and others are thickly covered with marks of different shades of brown and reddish brown. One beautiful variety has been described, the ground-colour a very light greenish white, blotted with two shades of rich brown. In some instances they are found entirely white.

The young birds leave the nest and betake themselves to the water as soon as hatched.

Sir William Jardine writes, 'They are particular in the choice of a breeding-place, at least some which we would think suited for them, are passed or deserted, and others more unlikely are selected. We possess a reedy loch which was for many years a haunt of these birds, but the edges were planted and they left it; ten years afterwards, and when the plantation had grown up, a few pairs returned, and in time increased to a colony, when an artificial piece of water was made by damming up a narrow pass in an extensive muir, nearly two miles distant; thither the Gulls resorted the following spring, leaving their ancient ground; and they have been increasing in numbers for some years past.'

Male; weight, ten ounces; length, one foot four to nearly one foot five inches; bill, deep vermilion red; iris, dark brown; the eyelids deep vermilion red, less bright in winter, a few

white feathers nearly round them; behind the eye is a spot of white, and in winter a crescent-shaped patch of black and grey in front of it, and another on the ear coverts. Head, crown, and neck all round on the upper part, dark brown, in winter white, with only a dusky patch behind the eye; the dark colour appears to be assumed again in the spring very rapidly; the feathers are not shed, but their colour is changed; in a bird kept in the garden of the Zoological Society, the metamorphosis was completed in five days; it began on the 11th. of March; nape, white; chin and throat, dark brown, in winter white; breast, white, with sometimes a roseate tint; back, pale blue grey.

The wings have the first quill feather the longest; they are upwards of three feet in extent; greater wing coverts, white; lesser wing coverts, pale blue grey; the first primary is black on the lower part of the outer web, the tip, and the outer margin of the inner web, the rest of it white, the three next are white on the shafts and the greater part of the outer webs, but margined gradually with black; the ends, except the extreme point, which is white, and half their inner webs black, passing into blackish grey near the bases of the feathers; the fourth is white on the outer web, grey on the inner, but edged with black; the fifth and sixth grey on both webs, the edge of the inner and the tip black; tertiaries, grey. Tail, white; upper tail coverts, white. Legs and toes, deep vermilion red, all more dull in winter.

The female resembles the male.

The young are at first covered with down of white, grey, and brown, and very soon become fledged.

In the young bird of the year, the bill is yellowish brown with a tinge of red, the tip darker; the head on the crown and back is yellowish brown with some white, in winter white streaked with grey, and before the eye is a crescent-shaped spot of deep brown, and another upon the ear coverts. Throat and breast, white, with a faint blush of pink; back on the upper part, bluish grey, on the lower white. Greater wing coverts, bluish grey; lesser wing coverts, bluish grey, mottled with yellowish brown; the primaries have their outer webs and tips dusky black, the inner ones white; secondaries, yellowish grey, edged with white; tertiaries, yellowish grey, edged with white. Tail, greyish white on the inner part with a broad bar of dusky black at the end, narrowed in winter. Legs and toes, yellowish brown; webs, yellowish brown.

LAUGHING GULL.

BLACK-WINGED GULL. HOODED GULL.

Larus atricilla,	Pennant. Montagu. Fleming.
" "	Jenyns. Temminck.
Xema atricilla,	Gould.

Larus—A ravenous sea-bird. *Atricilla. Ater*—Black. *Cilla*—.....?

This species has occurred in Europe in Russia, Spain, Italy, Sicily, and the Islands of the Grecian Archipelago, and the Mediterranean generally. In Africa, about the Straits of Gibraltar. In America, at the Tortugas, Tobago, Texas, and New Jersey.

Catesby, the author of the well-known 'Natural History of Carolina,' gave the present species its name, and Colonel Montagu made known its occurrence as an English bird. He first noticed five, two old, and three young ones, near Winchilsea, in Kent, in the month of August, 1774: one of them was shot. He also saw two others near Hastings, in Sussex.

These birds feed on small fish, insects, and crustacea.

The present species builds in marshy places near the sea-shore. Meyer asserts that during fine weather this bird sits on the eggs only at night, leaving the breeding-place early in the morning for the purpose of feeding, but that, when the weather is wet or cold, she remains on the eggs, and takes care of them also during the day.

The nest is made of dry grass and sea-weeds, arranged to a height of two or three inches, the interior being from four and a half to five inches wide, and one and a half deep.

Audubon mentions a curious instance of two nests being built as it were into one; each pair of birds, both male and female, living in the closest companionship, in both senses of the word. In some cases the sand alone is hollowed into a nest. Many pairs build near together.

LAUGHING GULL.

The eggs are three in number at the most; their usual colour is brownish olive, spotted and blotted with dull reddish brown, the said markings being most numerous about the larger end. They are considered very good to eat.

The old birds exhibit much care for their charge. The young ones quit the nest soon after being hatched; namely, in about six weeks, when the parents leave them to themselves; and they keep in separate flocks through the winter.

Male; length, one foot five to one foot six inches; bill, deep lake red; iris, very dark brown—nearly black. Head, crown, and neck all round on the upper part, dark bluish leaden grey; the remainder of the neck and the nape, white, with a pale tinge of red in the living bird. In winter, 'per contra,' the forehead is white, and there are some white spots about the eye, the remainder of the head and upper part of the neck, white, with some grey marks. Chin and throat, dark leaden grey, in winter white; breast, white, with a tinge of pale red, in winter silvery white; back, greyish blue on the upper part, on the lower white: in winter the upper part is silvery grey.

The wings have the first quill feather the longest; they reach, when closed, two inches beyond the end of the tail. Greater wing coverts, greyish blue, tipped with white in winter; lesser wing coverts, greyish blue, in winter dusky brown. The primaries are slightly tipped with white; the first is black, with a tinge of grey on the inner web at the base, the second and third similarly marked, but with the grey more extended, the fourth is grey for two thirds of its length, the fifth is all grey, except an inch and a half, which is black, and the sixth, all but two spots of black; the rest of the primaries are greyish blue. In winter the first is brown, the next five are also brown, but each with one white spot, the four next have the shafts brown, the webs white. Secondaries, largely tipped with white; tertiaries, also tipped with white; greater and lesser under wing coverts, white. Tail, white, in winter the outer feather on each side is white, the others with a broad band of brown at the end; upper and under tail coverts, white. Legs and toes, deep lake red; webs, deep lake red.

The female is rather less than the male, and the head is of a lighter shade of leaden grey.

In the young the head, crown, and neck all round, are slate grey; chin and throat, slate grey.

IVORY GULL.

SNOW BIRD.

Larus eburneus,	Gmelin. Latham. Selby.
" "	Jenyns. Temminck. Gould.
" *candidus*,	Fleming.

Larus—A ravenous sea-bird. *Eburneus*—Like ivory.

This snow-white Gull belongs naturally to the high latitudes, and is accordingly found in the American portion of the north, about Davis Straits, Baffin's Bay, Port Bowen, Hecla Cove, Greenland, Labrador, Hudson's Bay, Behring's Straits, and Newfoundland; on the European side, in Spitzbergen.

In Holland one was shot on the coast, by M. Temminck; and on the French shore a specimen also occurred.

A specimen of the Ivory Gull was shot on the 18th. or 19th. of January, 1853, at Livermead, near Torquay, Devonshire. In Yorkshire, one at Scarborough. One in Norfolk at Yarmouth. In Sussex one was shot at Hastings, in 1848. In Cornwall a specimen which had been seen on the 13th. of February, 1847, at Bar Point, Falmouth, was shot at Penzance the following Monday.

In Scotland one, a female, was shot near Banff, Aberdeenshire, on the 29th. of January, 1847; one, a young bird, in the Firth of Clyde.

In Ireland it has occurred on the west coast, near Tralee, one having been seen there in a field about four miles from the sea, by Thomas F. Neligan, Esq.; in allusion to which, Mr. Thompson in his 'Natural History of Ireland,' states that Mr. R. Chute, in writing to him, supplied the following satisfactory information:—'After the storm that occurred in the beginning of February, 1847, there were several Ivory Gulls about here, I heard of three being seen near Dingle;

—one of them I saw myself. During my absence from home, two of them for a few days in succession alighted in my yard; my servant thought they were tame birds, and did not frighten them. However, one was shot on the third day, and when I came home I found it to be an Ivory Gull in rather immature plumage: the other bird they said was pure white: —though frequently seen since, I was not able to procure it. I have the bird that was shot now in my collection.'

In Shetland one of these birds was obtained on the 13th. of December, 1822, at Balta Sound, by Laurence Edmonston, Esq.

In Orkney one in 1832; a second was shot in the Bay of Firth, by Mr. Strang, during the winter of the same year; a third subsequently.

These birds are generally seen out at sea, often in company with the Fulmar, except of course during the breeding seasons.

Some migrate southwards at the advance of winter.

'Parties numbering from thirty to fifty associate together on the open sea.'

Their flight is easy and graceful.

The Snow Bird, according to Captain, now the Rev. Dr. Scoresby, in his account of the Arctic Regions, rarely alights on the water, but often sits on the ice, preferring the most elevated situations.

They are ravenous in their habits, and eat all that comes in their way in the shape of food; any thing and every thing that presents itself in this form is a 'bonne bouche' to the maw of the Gull.

The note is harsh and strong.

This Gull builds on cliffs and rocky shores in the extreme north; and the nest is said to be a layer of sea-weed.

The eggs are reported to be two or three in number; they are of a cream-white colour, spotted with grey, reddish brown, and brownish black.

The spotless purity of the plumage of this beautiful bird rivals the whiteness of the enduring snows of the northern lands to which it belongs, the whole being, however suffused with a rosy tinge.

Male; length, one foot five inches and a half to one foot eight inches; bill, pale yellow, at the tip darker, greenish grey towards the base; iris, brown, the eyelids red at the edge. Head, crown, neck, nape, chin, throat, breast, and back, pure white. The wings, which are longer than the tail, reach to

the width of three feet three inches and a half when extended, greater and lesser wing coverts, primaries, secondaries, tertiaries, greater and lesser under wing coverts, tail, and tail coverts, pure white. The legs, which are feathered nearly to the knee joint, and the toes, black, the latter very rough beneath; the webs are also black, very rough beneath, and deeply scalloped.

In the young the bill is olive yellow; iris, dusky; a greyish black bar, more or less complete according to age, extends from the bill to the eye. The head, crown, neck on the back, and nape, have more or less greyish brown specks and spots; chin and throat, white; back and greater and lesser wing coverts, white, studded with well-defined dusky brown spots. The primaries are tipped with dusky brown, the first feather retaining the mark the longest. The tail has a uniform dusky brown line across the end; upper tail coverts, white, with dusky brown spots at the tips of the feathers; the legs, which are short, and the toes, dull blackish; webs, dull blackish.

The portrait of this bird is from a drawing by J. Gatcombe, Esq., of Wyndham Place, Plymouth.

COMMON GULL.

COMMON GULL.

SEA MEW.

Larus canus, LINNÆUS.

Larus—A ravenous sea-bird. *Canus*—Hoary.

THIS Gull is not so common, as compared with other British species, as its name imports.

In Europe, it is plentiful on the shores of Lapland, Norway, the Ferroe Islands, Holland, France, Italy, and Spain. In Asia, in Persia and about the Caspian Sea; and in America, in the northern regions.

These birds breed in great numbers in Yorkshire, about Flamborough Head; individuals are shot almost every year in the neighbourhood of Leeds, in the West-Riding, and a few have occurred at Barnsley, Hebden Bridge, York, and Sheffield; on the coast they are numerous. In Cornwall, they are common at Penryn River and other parts of the shore; so also in Kent and Essex, by the sides of the Thames. In Norfolk, about Yarmouth and along the sea-board, commonly; thus too in Lincolnshire, Sussex, Dorsetshire, and in fact all round the island. Some are seen in Northamptonshire nearly every winter; the same remark applies to Oxfordshire, as also to Cambridgeshire. In Derbyshire, they occur occasionally along the Trent side. In Surrey near Godalming, and one at Fair Mile Common, near Cobham, December 26th., 1836; one also on the River Mole, near Hampton Court.

In Scotland, about St. Abb's Head, in the county of Berwick, in vast quantities; so too in Sutherlandshire Mr. Selby mentions several breeding stations, namely, on Loch Shin, Loch Laigal, and various smaller lochs. It is common in Orkney, Shetland, and the Hebrides. So likewise in Ireland, and also in Wales.

They frequent the sea-coast, especially near the mouths of

rivers, but in the autumn, winter, and spring wander far inland, to feed on ploughed and pasture lands, returning, however, always to the coast for the night.

It would appear that some migrate southwards, towards the approach of winter, from the frozen regions.

These birds, like the others, are readily kept in confinement, and will live for years in a walled garden, where they are very useful in devouring insects. One belonging to the Rev. Dr. Thackeray, Provost of King's College, Cambridge, and kept in the garden of the College, laid one or more eggs for several seasons. They are quiet in their habits, and associate with poultry. In the autumn, parties of them may be seen in clear weather high aloft in the air, wheeling about in circles; and this is said to be a sign of stormy weather.

They are admirably expert on the wing, and fly about with great lightness and ease.

They often pick up beans, wheat, and other grain sown in the fields, as well as worms, larvæ, and insects, which they search for in the ploughed lands many miles inland. Their food is also fish, as likewise crustacea and mollusca, and, in fact, anything eatable that floats on the surface. 'For this kind of food they watch with a quick eye, and it is curious to observe how such as are near the breakers will mount upon the surface of the water, and run splashing towards the summit of the wave to catch the object of their pursuit.' They are voracious birds, and one has been known to swallow an eel a foot long.

The nest of this Gull, which is rather large, is only a slight comminglement of grass, if placed on the turf, or a larger assortment of this material and sea-weed, if built upon the rock; precipitous places are used, as well as the lower ground, and in one instance Sir William Jardine mentions his having known several nests placed on the walls of an old ruin. Both the sea-coasts and the shores of inland lakes and marshy islands are resorted to for nidification. These birds appear to keep aloof in their building as much as may be from their congeners. Large numbers breed together in many cases, and in others a few pairs, or even a single pair by themselves.

The eggs, two or sometimes three in number, are of various shades of colour—light blue, yellowish white, pale yellow, green, brown, and dark olive brown, spotted and blotted irregularly with deeper brown, grey, and black.

Male; weight, about one pound; length, between one foot five and one foot six inches and a half; bill, pale yellow towards the tip, tinged with bluish or greyish green near the base; iris, dark brown, the edges of the eyelids are red. Head, crown, neck, and nape, white, in winter streaked with brown; chin, throat, and breast, white; back, fine pale bluish grey.

The wings are three feet in extent; of the primaries the first two are black, with a pretty large white spot near the tips; the next four tipped with black. The following is Mr. Yarrell's description of them: 'primaries, black on the outer web, with a small portion of pearl grey at the base of the inner web, the proportion of grey increasing on each primary in succession; the first and second primaries with a patch of white on both webs near the end, but the extreme tips of both are black; the third, fourth, fifth, and sixth, have white tips.' Secondaries and tertiaries, grey, largely tipped with white; greater and lesser under wing coverts, white. Tail, white; upper tail coverts, white. Legs and toes, dull greenish grey, with a tinge of dull yellowish red.

The female is rather less in size; length, about one foot four and a half to one foot five inches.

In the young bird for the first year the bill is blackish brown at the tip, the base dull yellowish red brown; iris, dusky brown, in front of the eyes is a patch of deep brown; the eyelids yellowish brown. Head on the sides, crown, and back, streaked with dusky greyish brown spots, the white through giving the bird a sort of 'bien poudré' appearance; in the second year the head and neck become white in spring and summer, but in the autumn and winter are streaked and spotted with greyish brown. Chin and throat, white; breast, greyish white marked or mottled with pale brown, chiefly in the form of a band across the upper part of the breast, and continued over the sides and flanks the first year, more white the second. Back on the upper part, in the first year, brownish grey, each feather being edged with greyish white; on the lower, white. bluish grey feathers gradually become interspersed.

The wings, when closed, reach two inches and a half beyond the end of the tail; greater wing coverts, bluish grey, with a brownish grey bar, and ended with dull white; lesser wing coverts, bluish grey, some of the feathers with dusky centres and yellowish brown and white edges. Primaries, blackish grey on both the shafts and the greater part of the webs,

with white at the tips till the second year, all but the first being tipped with brown: secondaries and tertiaries, brownish grey, the feathers edged with paler yellowish brown and white. The tail white, with a broad dusky black bar on the outer half to the end, the bar continued through the second year, the extreme tip greyish white, namely, all but the outside feather on each side, which has the outer web white with the least portion black; upper tail coverts, dull white; under tail coverts, white. Legs and toes, dull greyish white, with a tinge of dull yellowish red, the joints pale blue; claws, black.

ICELAND GULL.

ICELAND GULL.

WHITE-WINGED SILVERY GULL.

Larus leucopterus,	Faber. Eyton. Temminck.
" *Icelandicus,*	Fleming. Selby.
" "	Jenyns. Gould.
" *glaucoides,*	Temminck.
" *arcticus,*	Macgillivray.

Larus—A ravenous sea-bird. *Leucopterus. Leucos—leucon*—White. *Pteron*—A wing.

This Gull occurs plentifully in North America, in Greenland, Davis' Straits, Baffin's Bay, and Melville Island. In Europe, it has been noticed in Iceland at times in great numbers, Sweden and the Ferroe Islands, Belgium, and Holland.

Young birds of this species are occasionally killed on the coast of Yorkshire; an adult specimen in one instance; another in the possession of John Malcolm, Esq. A few stray along the Northumbrian coast. One of these Gulls was shot in Norfolk, in December, 1847, at Blakeney; one about the 19th. of the same month in the previous year. In the year 1830, three were killed on the 14th. of January, and several others were obtained about the same time, one of which was in adult plumage; another at Yarmouth, November 29th., 1851. Immature birds are not unfrequently met with late in the autumn; adult ones are very rare. In Oxfordshire, a specimen was shot on Port Meadow, near Oxford, in the spring of 1836. One, an immature bird, at Scilly, in Cornwall, the end of May or beginning of June, 1852. In Devonshire, one at Laira, near Plymouth, January 30th., 1855; one previously. In the London market a specimen was obtained in the winter of the year 1838.

In Scotland, two, both immature, were seen near Banff, Aberdeenshire, in January, 1847. In Shetland, the young

occur every winter in Unst and the other islands. Mr. Robert Dunn shot an adult specimen at the end of the year 1847, and another on the 22nd. of November, 1852. In Orkney one or two have been obtained.

It is a very rare species in Ireland; but two have occurred there.

In their natural habits they are not so shy, and Faber has mentioned one which used to come to his door at a certain time every morning to be fed. They also follow the boats of the fishermen to pick up what they can.

They soar at times high in the air. They swim well. They often sit together by hundreds on the ice.

They feed on fish, crustacea, mollusca, and anything else that is eatable. They are, in fact, equally indiscriminate as the rest of their congeners in their choice, or rather their taking of their food without choice, 'fish, flesh, and fowl,' being all alike to them.

The Iceland Gull builds on the face of a precipice or cliff, but at a rather low height. It shares the place with other species.

The eggs are of an olive green colour, spotted with two shades of brown.

Male; length, one foot ten inches; bill, yellow, the tip and base deeper-coloured than the rest, the angle on the lower side of the under mandible red; iris, pale yellow, the eyelids red. Head, crown, neck, and nape, white, the former in the winter months spotted with grey; chin, throat, and breast, white. Back, very pale bluish grey. The wings, when closed, reach about or nearly two inches beyond the end of the tail; greater wing coverts, very pale bluish grey; lesser wing coverts, also pale bluish grey, the tips white; primaries, white, pale greyish towards the base, the shafts white; secondaries, white; tertiaries, white; greater and lesser under wing coverts, white. Tail, white; upper tail coverts, white. Legs and toes, pale yellowish red.

The female in the second year is white, mottled all over with yellowish brown, each feather having a central mark of that colour, most so on the primaries, tertiaries, and tail.

The young are of a pale fawn-colour. Bill, pale yellow at the base, the front portion blackish horn-colour; iris, dark brown at first, afterwards pale greyish yellow. Head, crown, neck on the back, and nape, dull white, clouded with pale greyish yellow brown; chin, dull white. Throat and breast,

dull white, streaked across with pale brown. Back, dull white, clouded with pale greyish yellow brown.

Greater and lesser wing coverts, dull white, crossed with angular-shaped pale brown streaks; primaries, greyish white, with a slight tinge of brown, or fawn, or cream-colour: secondaries and tertiaries, dull white, crossed with pale brown angular-shaped streaks. Tail, greyish white, marked across with rather broad lines of pale brown, most so on the inner half; upper tail coverts, greyish white. Legs and toes, yellowish red brown.

The full plumage appears not to be attained till the fourth summer.

LESSER BLACK-BACKED GULL.

YELLOW-LEGGED GULL.

Larus argentatus,	Montagu.
" *fuscus*,	Bewick. Fleming. Selby.
" "	Jenyns. Gould. Temminck.

Larus—A ravenous sea-bird. *Argentatus. Argentum*—Silver.

The Gull thus called is, in Europe, common in Norway, and generally on the coasts of the Baltic Sea, and is found in Holland, Belgium, France, Dalmatia, and throughout Italy. In Africa, it occurs in Egypt, and thence to Barbary, and so on to the Cape of Good Hope; and in Asia, in Syria, Asia Minor, and Arabia, along the shore of the Red Sea; also in North America, coming south to Carolina.

This species breeds on Romsey Island, in Pembrokeshire, Wales; the Fern Islands, off the coast of Northumberland; as also inland on the moors, by the Cumberland Border, and is likewise known along the shores of Sussex, Hants, Suffolk, Dorset, Devon, and Cornwall, in which last-named the species is not uncommon about Falmouth, Penryn River, Swanpool, Gwyllyn Vase, and the coast generally.

In Scotland, they also build on islands in Loch Awe, Loch Shin, Loch Laigal, and others in Sutherlandshire, and at the Solway Frith; also in the Hebrides.

Individuals have occurred in Yorkshire, at Leeds and Sheffield, young birds; on the coast it is not uncommon. In Norfolk, two were shot in Yarmouth Roads, October 7th., 1827: they occur along the coast, but not in large numbers. A solitary individual has sometimes been seen in Oxfordshire, near Witney, and the species occurs not very unfrequently in different parts of the county. Some visit Northamptonshire nearly every winter.

It is indigenous in Ireland, but local; likewise in several parts of Scotland, both on the inland lakes and the sea-shore, in Dumfriesshire and other counties; and in Wales has been noticed in the Isle of Anglesea. It is also a constant inhabitant in Orkney, but in winter is the most plentiful; so too in Zetland.

When engaged with their nest and young, these Gulls are very bold and daring, and will dash about and at an intruder in the most fearless, intrepid, and impetuous manner, not demeaning themselves to the 'suggestio falsi,'—the expedient of birds of a more gentle nature: at other times they are far from shy. The old birds will not allow the younger ones to inhabit their breeding stations. They are capable of being kept in confinement, like the other species. They often follow the course of rivers a long way up. They associate with and build in the same places as the Herring Gulls.

They fly well, skimming over the sea, and not high when over the land.

They feed on fishes; also on insects, caterpillars and worms, which they search for several miles inland in the fields. One kept by Mr. Selby used to swallow young birds.

The present species builds on bare and barren islands, both those of the sea-coast and those of inland lakes, as well as on the margin of the mainland. Steep and precipitous cliffs are used, as well as low marshy moors and sandy places a little way inland.

The nest is a tolerable quantity of grass, with occasionally, though rarely, some sea-weed placed loosely together in some slight hollow in the rock or the adjacent herbage, the latter least frequently.

The eggs, which are two, three, or four in number, are of almost every variety of shade of green and brown, olive green, olive brown, and stone-colour, thickly spotted with grey, brown of two shades, and brownish black.

The first or second week in June is the time of building.

Male; weight, about thirty-six ounces, or sometimes more; length, one foot and eleven inches, to two feet; bill, yellow, the angle on the lower part red; iris, pale yellow; the eye-lids vermilion red. There is a dusky spot before the eye in winter. Head, crown, neck, and nape, white, in winter streaked with dusky brown; chin, throat, and breast, white; back, dark slate grey.

The wings extend to the width of four feet and a half,

and reach two inches beyond the end of the tail. Greater and lesser wing coverts, dark slate grey; primaries, dark slate grey, the six first tipped with white, namely, the first with a broad bar, and the extreme tip white, the others with only the tips white, in a triangular form. Secondaries, dark slate grey, the ends white; tertiaries, dark slate grey, the tips of some of them white. Greater and lesser under wing coverts, white. Tail, white; upper and under tail coverts, white. Legs and toes, yellow; claws, dusky.

The young are at first covered with down of a grey and brown colour, and become full-fledged in a month or five weeks. When a year old the bill is dark horn-colour, the base pale brown; iris, dark brown, a dark spot before the eye. Head, crown, neck, and nape, white, streaked with dusky brown; chin and throat, white; breast, white, mottled with dusky brown; back, greyish brown, the shaft of each feather deep brown, and the tips and edges of the feathers greyish white. Greater and lesser wing coverts, greyish brown, margined with yellowish grey or white; the shafts deep brown; primaries, blackish brown; secondaries, blackish brown, with narrow greyish yellow tips; greater and lesser under wing coverts, white. The tail has a blackish brown bar at the end, edged with white, the middle feathers varied with most of the former, and the outer ones with most of the latter colour; upper tail coverts, white; under tail coverts, white, mottled with dusky brown. Legs and toes, pale brown.

The full plumage is not arrived at till the third year.

GREAT BLACK-BACKED GULL.

GREAT BLACK-BACKED GULL.

WAGEL. COB.

Larus marinus,	Pennant. Montagu. Selby.
" "	Bewick. Fleming. Jenyns.
" "	Gould. Temminck.
" *nævius*, (young,)	Bewick.
" *niger*,	Brisson.

Larus—A ravenous sea-bird. *Marinus*—Belonging to the sea—marine.

This fine bird occurs in Europe, in Sweden, the Ferroe Islands, Denmark, France, Italy, Germany, Holland, Norway, and Iceland. In America, in Greenland, Baffin's Bay, Labrador, and as far south as Florida. In Asia, in the vicinity of the Caspian Sea.

It is with us a not uncommon though not numerous species; seen throughout the year on the shores of the island, but for the most part singly or in pairs.

They breed abundantly in the Orkney and Shetland Islands, also on the Bass Rock, in the Firth of Forth, and one or two other stations on the Scottish coast, and the northern islands of the same; so to on Lundy Island and Steep Holme, in the Bristol Channel; Souliskerry in the Orkneys; and in Shetland; as also, according to Mr. Yarrell, on the low lands of the estuary of the Thames.

In Yorkshire, I have seen the Black-backed Gull near Burlington, and it is not uncommon on the coast. So in Norfolk, at Yarmouth, and along the shore; as likewise in Suffolk, Durham, and Northumberland, also in Devonshire, and Dorsetshire. In Surrey it has occurred at Godalming.

In Cambridgeshire one was bought at Cambridge, in the market. In Oxfordshire, small parties of four or five have been frequently noticed. In Cornwall the species is not uncommon at Falmouth, Penryn River, and other parts. In Kent and Essex along the banks of the Thames.

It is a tolerably common species in Ireland, and a resident

throughout the year. So, too, in Scotland, as in Sutherlandshire on the friths. In Wales, in Caermarthenshire, near Tenby and Laugharne.

In Orkney it is described by Dr Baikie and Mr Heddle as being pretty widely distributed. Also in Shetland.

These birds seldom advance farther inland than the estuaries of the sea.

It is curious that this Gull should be very shy, while the Wagel, the same bird, so called at a different and younger period of life, is not by any means so much so. It would seem as if, like other kinds, they find 'sero sed serio' the danger of any but a distant acquaintance with man. So again, as remarked above, the old ones go for the most part singly or in pairs, while the young assemble in companies; more than eight or ten are seldom seen together.

These are powerful birds, and at the same time bold and daring, and stout opponents. They may be kept in confinement, and Mr Yarrell has furnished an account of one as sent to him by the Rev Robert Holdsworth, which was hatched successfully from an egg taken by the crew of H.M Revenue Cutter Vigilant, and lived for many years quite tame, near Dartmouth. It swam in the river every day, and looked out for the fishermen returning from sea, who were in the habit of feeding it.

The eggs are eaten and considered good by the inhabitants of the northern islands.

These birds float aloft at times on almost motionless pinions, wheeling round and round in a chain of circles. Their ordinary flight is rather slow, but powerful, and they wing their way along without much seeming effort. They sail buoyantly on the water, and swim well.

They feed on fish, and anything that is capable of being fed upon, and are said even to attack and destroy lambs. One has been seen to drop on a Guillemot which had just been shot, and begin to devour it. Smaller birds are therefore, as might be hence supposed, not objected to. They drive away the Lesser Gulls from any prey they may have discovered.

The note is a mere 'kac, kac, kac,' uttered in a loud, rough, and harsh tone, capable of being heard at a great distance. It is uttered most in the spring-time.

The Great Black-backed Gull builds chiefly in marshes and low undrained moors, as also in and on the cliffs and rocky islets of the sea-coast and of inland lakes, making its nest of

dry grass, sea-weeds, and sticks. Many resort to the same place. The nest is of large size. Both male and female assist in its construction.

The eggs are three in number. They are considered very good to eat, and great numbers are taken for the purpose, the first and second clutch being removed, and the bird then laying a third time. Their colour is yellowish brown, with a tinge of green, a little spotted with bluish grey and dark brown.

Male; weight, nearly five pounds; length, two feet six inches or over. The bill, which is large and very strong, is pale yellow, the lower angle of the under mandible orange red, with a dusky black spot in the middle on each side; the tooth of the upper bill dusky in winter. Iris, pale yellow; the eyelids bright red; there is a dark mark before the eye in winter. Head, crown, neck, and nape, white; in winter the former streaked with a little grey; chin, throat, and breast, white; back, dark leaden grey.

The wings reach in extent to the width of five feet nine inches; greater and lesser wing coverts, leaden grey; primaries, nearly black, the first and second ending with a triangular-shaped white patch, longest in the former, the second with a black spot in the white near the tip, the third with a short white tip, the fourth with a short white tip, succeeded by black, and this followed by a narrow clouded bar of greyish white, the others tipped with white, the inner webs being leaden grey; secondaries, leaden grey, ending in white, forming a bar across the wing; tertiaries, leaden grey, also ending in white; greater and lesser under wing coverts, white. Tail, white; upper tail coverts, white; under tail coverts, white. Legs and toes, pale yellowish red.

Female; length, two feet three or four inches.

In the young the bill is black; iris, dark blue; head, crown, neck, and nape, dull white, mixed with greyish brown; chin, throat, and breast, also dull white, but paler in the markings. Back, greyish brown, the feathers dark in the middle, the edges greyish white. Greater and lesser wing coverts, mottled and spotted with pale greyish brown and greyish white; primaries, black, greater and lesser under wing coverts, dull greyish white, with some pale brown marks. The tail has the middle feathers black, tipped with white, the side feathers mixed with black and white. Legs and toes, dull greyish white, with a red tint.

HERRING GULL.

SILVERY GULL.

Larus argentatus,	Bewick. Fleming. Gould.
" "	Jenyns. Selby.
" *fuscus*,	Pennant. Montagu.
" *glaucus*,	Temminck.

Larus—A ravenous sea-bird. *Argentatus. Argentum*—Silver.

This bird has an extensive European range, occurring in Iceland, the Ferroe Isles, Norway, Sweden, and Denmark, Holland, France, Italy, and Turkey. It belongs also to Africa, and is seen at Madeira; so too in Asia, in Asia Minor and along the shores of the Black Sea; and is also an American species, observed in Greenland and at Melville Island, Mexico, and thence to Labrador, and on Whitehead Island, in the Bay of Fundy, also about New York and Philadelphia.

The Herring Gull is common on our coasts, and remains throughout the year.

The present species breeds abundantly at Flamborough Head, in Yorkshire, the well-known promontory on which a light-house has for ages been placed, from whence its name, originally, no doubt, Flameborough; also on the Fern Islands, off the Northumbrian coast; North Berwick Harbour, in Scotland, and the Solway Frith; Sumburgh Head, in Shetland; and on an island near St. David's Head, in Wales.

In Yorkshire, it is a common species on the coast, and, inland, specimens have been procured at Hebden Bridge and Barnsley, and at Sheffield, young birds. In Suffolk, they are not uncommon; and in Norfolk, about Yarmouth and along the coast. In Hampshire, they are exceedingly common about Lymington; also in Dorsetshire and Devonshire, and are not uncommon in Cornwall, about Falmouth and Penryn River.

Larus glaucus.

One, of which Mr. Thomas Willmot has written me word, was captured between Windsor and Maidenhead, Berkshire, on or about the 25th. of January, 1855. A few are seen in Northamptonshire most winters. In Worcestershire, one was shot towards the end of February, 1843, at Lower Wick, on the banks of the River Teme, near Worcester. The species is frequently observed in Oxfordshire. Parties of them occasionally visit the River Trent, in Derbyshire, for a few days. Two were believed by the Rev. Leonard Jenyns to have been shot at Overcote, near Swavesey, Cambridgeshire.

It is a common Irish species, and frequents also the coast of Wales in abundance. It is extremely numerous in many parts of Orkney and Shetland.

I have received several particulars respecting this species from John Dutton, Esq., R.N. He writes—'The Herring Gull is exceedingly common on the coasts of Hampshire and in the Isle of Wight. They build in great numbers in Scratchell's Bay, and in the cliffs under the Needles lighthouse. It is a fine sight to see them from the tops of those grand old cliffs, towering aloft in graceful circles, their beautiful snow-white necks contrasting finely with the blue of their backs. They build on the ledges of the cliffs, and frequently in the beds of samphire, which grows in abundance there.'

The Herring Gull, which is readily tamed to a certain extent, so far as to follow a gardener while digging, to pick up any dislodged insects, has been known to breed in confinement, namely, near Fermoy, in the county of Cork, as recorded in the 'Zoologist,' page 1395; another pair at Walthamstow, for three successive years; also at Quig Hall, the seat of J. T. Martin, Esq., two eggs were laid, and one young bird reared: one kept in a garden made a great friend of a terrier dog. Montagu mentions one which thus lived in confinement for thirteen years.

Mr. Hewitson gives the following, as communicated to him by the Rev. W. D. Fox:—'At Colbourne, in the Isle of Wight, a Herring Gull made its escape about thirty years ago from a garden where he had been kept a prisoner. From that time, however, to the present, he has returned all but daily to visit the place of his former captivity, though at the distance of six or seven miles from that part of the coast where they resort. Here he is regularly fed, and is so tame with the man who has regularly attended to his wants, that he would eat out of his hand, but will not allow any further

familiarities. In the breeding season he is accompanied by his mate, who will not venture to descend, but remains hovering and screaming over him whilst he is feeding below.'

These birds utter loud cries at the approach of danger, and so become sentinels for other species.

They fly rather slowly, and at a low height, sweeping down, and catching up any prey from the water. They walk about much on the sea-beach in search of food.

This species is very indiscriminate in its choice of food, swallowing alike small fish, small crabs, shrimps, crustacea, and mollusks generally, starfish, the eggs of other sea-birds, wheat, small birds, rats, mice, cockchaffers, worms, in fact any thing eatable. It gives preference, however, when it has a choice, to fish, and is very bold in approaching boats and nets, so as to have acquired in Italy the name of Fisherman —'Pescatore del onda.' It is said also to trample the soft sand, to bring its prey to the surface.

In the 'Naturalist,' vol. iii, page 28, George Donaldson, Esq. writes of one kept in a garden:—'At this period, however, he acquired a taste for Sparrows, and scarcely a day passed on which he did not regale himself with four or five of them. His system of catching them was this:—He was on the best terms with a number of Pigeons which this gentleman had, and as the Sparrows fed along with them, he mixed in the group, and by stooping assumed as much as possible their appearance, and then set at the Sparrow as a pointer dog would do his game; the next instant he had his prey by the back, and swallowed it without giving it time to shut its eyes. The sporting season began with him about the middle of July, as the young birds were leaving their nests; and as numbers of them were produced in Mr. Kemp's garden, and others came to practise there, they found it very slippery ground, for the enemy was upon them in a moment. At the expiration of three years, his plumage was assuming a lighter shade, although the grey feathers on the under part of his body were quite apparent. He pursued his old system of snatching and swallowing with great success, and arrived at so much perfection in the art that he caught his prey often while flying past, and occasionally sprang from the ground, and struck a bird down with his wing, which he had no difficulty in afterwards capturing. On one occasion, while standing near a pump well in the garden, he pounced upon a rat, which had come there for the purpose of drinking; it

squeaked on being caught, and Mr. Kemp, who was standing close by, looked immediately, and had scarcely time to see it suddenly disappear head foremost,—a rule which he had strictly observed, with both the living and the dead.' Another, kept by the same gentleman, devoured successively two clutches of young ducks; the first nine in number, and the second five.

The note is very loud and piercing, and is frequently repeated in the spring.

The Herring Gull makes a nest of dry grass and sea-weed on the ledges and small grassy or stony spaces that occur along the side of a cliff, and towards the top.

Great numbers of these birds breed together, and in close neighbourhood also with other species.

The eggs are two, or more properly three, in number. They are of a light olive brown colour, spotted over with darker brown of two shades; some deep olive green, blotted over with blackish brown. They are laid about the middle of May, and the young take wing about the 20th. of July.

The male bird keeps watch about the female when sitting, and comes to her assistance and defence if occasion requires.

Male; weight, from thirty to thirty-three ounces; length, up to two feet and half an inch; bill, pale dull yellow, the angle of the lower one dark orange red; iris, pale yellow, the edges of the eyelids orange red. Head on the crown, which in winter is streaked with greyish brown, neck, and nape, white; chin, throat, and breast, white; back, delicate bluish grey.

The wings expand to the width of four feet four inches; greater wing coverts, fine grey, the tips white; lesser wing coverts, fine grey; primaries, mostly black on the outer webs of the two first, the inner webs grey on the half towards the base; the first has a rounded triangular-shaped white mark at the end, the second and third also, but less in size. Selby gives the following description of these feathers:—'The six greater quills crossed by a black bar, which in the first occupies three fourths of the feather, but becomes rapidly narrower through the rest, and is scarcely an inch broad upon the sixth; the first quill with a white tip, marked with a small black spot on each web near the extreme point, the second with two spots on each side of the shaft, its tips, and those of the next four quills being white; the colour of the shaft corresponds with the part of the feather adjoining it.' Secondaries and tertiaries, tipped with white; greater and lesser under wing coverts, white. Tail, white; upper tail

coverts, white; under tail coverts, white; legs and toes, pale yellowish grey, with a tinge of light red.

The autumnal moult begins about the middle of August, and a partial spring moult about the middle of February, when the mottled feathers of winter are discharged, and the pure white of summer restored.

The female is less in size than the male, her measurement being about one foot ten inches or over, to one foot eleven inches.

The young are at first mottled with brown and dull white; the quills dusky, with no white at the tips, the tail with a dusky bar at the end, the bill horn-colour, the iris dusky, and the legs dark. Subsequently in the first year the bill is blackish grey at the tip, the remainder pale yellowish red; iris, dark; head, crown, neck, and nape, greyish white, streaked and mottled with pale brown; chin, nearly white; throat and breast, greyish white, streaked and marbled with pale yellowish brown. Back, a mixture of different shades of grey and pale yellowish brown, the feathers being edged with pale rufous; primaries, greyish black. Tail, marked at its base with white and brown, more white in the second year, the rest brown, but the tip a pale rufous yellow. Legs and toes, pale yellowish red.

They do not arrive at maturity till the third year; the following account of their change of plumage is from Montagu; —'In the second year the colours continue the same, but rather lighter; in the autumnal moulting the back becomes ash-colour, the iris gets lighter, inclining to yellow, the bill the same. In the next change we find the wing coverts still mottled with brown, the head and neck streaked with dusky brown, the bar in the tail broken by numerous white undulated streaks running down the webs; iris and bill yellowish.'

GLAUCOUS GULL.

GLAUCOUS GULL.

BURGOMASTER. LARGE WHITE-WINGED GULL.

Larus glaucus, Bewick. Fleming. Selby.
" " Jenyns. Gould Temminck.

Larus—A ravenous sea-bird. *Glaucus*—Grey—sky-coloured.

As appertaining to Europe, the Glaucous Gull builds in Iceland and Spitzbergen, and specimens have occurred in the Baltic, in Sweden and Norway. It is common in Russia, and individuals have been met with in Germany; Belgium, as mentioned by M. De Selys Longchamps; at Dunkirk, in France; Italy, at Genoa, a single specimen in the winter of 1817. In America, in Greenland, about Baffin's Bay, Davis' Straits, Felix Harbour, and in various regions among the Polar seas, as also in the United States.

A mature specimen was obtained in Yorkshire, at Scarborough, in December, 1853; one at Rossington, in the West-Riding; considerable numbers of old birds were seen on the coast in the year 1830; the young occur every year. The Rev. Leonard Jenyns recorded one met with in Cambridgeshire. In Norfolk, one was killed at Horsea, and one at Blakeney, in December, 1847; the former was shot while perched on a Coot which had just before fallen to the gun, and on which it had then pounced; four were taken at Cromer, in January, 1850, two of them adult birds, but most of the specimens that have occurred have been in immature plumage; another, also an adult, at Yarmouth, November 29th., 1851; others also there, and three at Thornham, in the winter of 1836. Two were seen, and one of them obtained, at Ramsgate, in Kent, in 1846; both were young birds. In Sussex, one was caught near Seaford about the 20th. of December, 1852. In Devonshire, some have been obtained near Plymouth. Others in Cornwall. One

occurred in Gloucestershire, on the Severn, near Bristol, in the winter of 1840. A young bird was purchased in the London market in the winter of 1838.

In Scotland, Robert Gray, Esq., of Southcroft, Govan, Glasgow, has written me word of his having shot this species at Dunbar. It occasionally occurs, he says, in severe weather, on the East Lothian shore. One was met with on Loch Lomond. One in the Firth of the Clyde, in December, 1822. Sir William Jardine says, 'We possess a specimen killed in winter in the Firth of Forth, and for the last two winters a Gull with white wings has occasionally travelled up and down the River Annan for fifteen miles, but has been so shy as to baffle all endeavours to procure it.'

In Ireland it is an occasional visitant.

In Shetland, many were observed at different times by Mr. Lawrence Edmonston, in 1809, November, 1814, and subsequently, chiefly in Uist, the most northerly of the group. A few immature birds occur every winter, and in the latter part of November, and up to the middle of December, 1847, four adult specimens were procured by Mr. Robert Dunn; he also obtained in January, 1848, four more, and in February one other. Three or four others, also adult, the end of 1852.

In Orkney, two were shot in Sanday, by Mr. Strang, in the winter of 1844-5. The species has since been known to occur frequently.

The present bird frequents both the open sea and the entrances of the more exposed bays, though at times seen inland in quest of food.

They are here only winter visitants, coming in the autumn and going in the spring, in or about October and April.

These birds are fearless and daring, though disposed to be shy when not attracted by food. They, like some others, bite severely if taken, and all the more so, as may 'a fortiori' be supposed, from their size and strength. They are generally seen singly or in small parties of three or four, that is to say in the most northerly of our islands; but as many as one hundred were seen together on one occasion in Shetland, by Mr. Edmonston, and in still more northerly regions they assemble in large numbers. They rest on the higher parts of floating masses of ice, and, when not feeding, are of grave and inactive habits.

They fly with the wings widely extended, and in an easy, measured, and buoyant manner.

They are ravenous birds, and devour indiscriminately anything eatable, not only fish, shell-fish, and crustacea, but even small birds and their eggs and young. They feed their nestlings with the same. Two Little Auks were found in one, and Faber saw another chased. They also rob other species of prey they may have captured, even the Fulmar, the Ivory Gull, and the Kittiwake, as mentioned by Captain (afterwards the Rev. Dr.) Scoresby, the Arctic voyager. They sometimes advance a little way inland for food.

The note is a loud and harsh scream.

This bird is said to build upon the sea-beach, just above high-water mark, as well as on the ledges of steep cliffs, and island rocks in the sea. The nests are composed of dry sticks and sea-weeds, with some lining of grasses, the whole laid together to the depth of about half a foot, the width being about two feet. They are tolerably strong, though inartificially constructed.

The eggs are stated to be of a pale purple grey colour, with scattered spots of brown, and pale bluish purple.

The young are hatched after an incubation of four weeks, and leave the nest about the end of July.

Male; weight, between four and five pounds—different individuals vary, as might naturally be supposed of any predatory birds, several ounces in weight; length, two feet eight or nine inches; bill, yellowish white, the angle of the lower mandible reddish orange, more red in winter; iris, pale yellow, the eyelids reddish orange. Head, crown, neck, and nape, white, slightly streaked in winter with bluish grey or pale brown, but the bird would seem to be less changeful in its plumage at the different seasons of the year than the other kinds; chin, throat, and breast, pure silky white; back, white, with a tinge of light bluish grey, in winter deeper grey.

The wings, when closed, scarcely reach to the end of the tail, and extend to the width of five feet five inches; greater and lesser wing coverts, white, with a pale tinge of bluish, in winter fine bluish grey at the base; secondaries, tertiaries, greater and lesser under wing coverts, tail, and upper and under tail coverts, white, with a silky lustre. Legs and toes, dull yellowish red; claws, dusky, and rather blunt.

The young are of a pale grey fawn-colour in their general appearance; the bill is dark horn-colour, the base pale yellowish brown; iris, dark. Head, crown, neck, and nape, dull white and pale greyish buff brown; chin, throat, and breast, dull

white, mottled with pale yellowish brown; back, dull white and pale yellowish brown intermixed.

The wings barely reach to the end of the tail; greater and lesser wing coverts, dull white mixed with pale yellowish brown; primaries and secondaries, greyish white, the shafts white; tertiaries, barred across with pale brown, the tips greyish white. Tail, yellowish brown, irregularly spotted; upper and under tail coverts, dull white, barred with pale brown. Legs and toes, dull yellowish red.

After the second moult the spots and bars decrease in size, the white advancing upon them; in the half-yearly change the upper part of the back acquires a few of the grey feathers, and the under parts and tail become white. The adult plumage is taken after the next moult, namely, at three years old.

KITTIWAKE.

KITTIWAKE.

Larus Rissa, MONTAGU. FLEMING. SELBY. GOULD.
" " " *tridactylus*, PENNANT. BEWICK. JENYNS. TEMMINCK.
" "

Larus—A ravenous sea-bird. *Rissa*—.....

THE Kittiwake is plentiful in many parts of Europe, as Norway, Sweden, the Ferroe Islands, Iceland, Nova Zembla, and Spitzbergen, in the north, and on the French coast: in Italy it has also occurred. It is common in Greenland, and on the continent of America, from the United States to Labrador, and the farthest north, inconceivable numbers congregating, Captain J. Ross, R.N., observed, in suitable places. In Africa, specimens have been procured at Tripoli, and on the west coast; and in Asia, near the Caspian Sea, and on to Kamtschatka in the north.

They breed in immense numbers on the northern coasts of Scotland, the Bass Rock and that of Glass, St. Abb's Head, in Berwickshire, Fowls-Heugh, near Stonehaven and Montrose, Aberdeenshire, Troup Head, the Isle of May, in the Frith of Forth, and other places; so too in the Shetland Islands. Also in Yorkshire on the cliffs about Flamborough, and so formerly at Scarborough and the Fern Islands off the coast of Northumberland. In Hampshire, at the Isle of Wight; and in Devonshire, Dorsetshire, and Cornwall.

The Kittiwake is common along the Yorkshire coast, and some have been seen about Sheffield, Huddersfield, and York. In Cornwall it is not uncommon about Falmouth, Swanpool, Gwyllyn Vase, and other places; as too in Norfolk, about Yarmouth, and along the coast. One, of which William Brooks Gates, Esq. has informed me, was killed at Pattishall, in Northamptonshire, during the severe frost in January, 1854;

and one the second week in February, 1855. The bird is seen on the River Nene in that county almost every winter; so likewise in Oxfordshire the bird is a common visitor at that season. In Surrey one was shot on Wandsworth Common, in February, 1851; and another at Hatch, near Godalming. In 1846, March 30th., one was caught near King's Newton, Melbourne, Derbyshire. It is more or less common on the coasts of Durham, Northumberland, Devonshire, Dorsetshire, Hampshire, both the mainland and the Isle of Wight.

It is a common species in Ireland. In Orkney it is very abundant, and in Shetland equally so.

They are summer visitors here, but some have been seen, though sparsely distributed, in winter. A young one was shot in Devonshire, in the month of November; and Montagu mentions three washed up on the shore in the month of March, 1806. Meyer also mentions his having obtained an adult bird, in perfect winter plumage, on the 19th. of January, 1837; and an immature bird on the 22nd. of February. Mr. Yarrell speaks of some seen by him at that season on the Dorsetshire and Hampshire coasts; and Sir William Jardine writes of the species as being seen also in winter, though rarely, in Scotland, on the coasts; sometimes too in the Frith of Forth; and of one as shot near Edinburgh, in January, 1843. The greater part of our native birds of the present kind would seem to retire to the eastern parts of Europe for the winter. This species has been kept in confinement, but requiring, as it does, a fish diet, it is more difficult to be preserved than the others which are of an omnivorous character.

They are naturally fearless birds, and far from shy, and are readily kept in confinement. A Gull, believed to be one of these, and which lived for twenty-seven years, used to go away in summer, and pair with another of the wild birds, in the cliffs of the Isle of Wight, returning alone afterwards, and spending its time either on a small piece of water, or sitting on the railings of some cottage, or else flying about the country, so tame withal that it would come into the houses and eat from the hands of persons whom it knew, though not from others. Great numbers are shot in some places in the north for the sake of their feathers.

They both swim and fly well and easily, but are indifferently able to walk or run on the land, owing to the shortness and

position of the legs. They feed on sea productions—fish, shrimps, and other crustacea, and the like.

The note of this Gull is considered to be expressed by its name, and is very often uttered. All the sea-birds' cries are in themselves harsh and discordant, but no doubt they sound 'most sweet voices' in one another's ears, as much so as those of the Nightingale or the Thrush are supposed by us to do to those of their own kinds.

The Kittiwake lays its eggs upon or in any small ledge or cleft on the side of a steep and rocky cliff by the sea. These are often so narrow and apparently insecure, that Selby says the young seem instinctively aware of their perilous situation, whence sometimes the least movement would precipitate them into the waves beneath, and are observed seldom to change their attitude in the nest till sufficiently fledged to be able to provide for their own safety. Immense numbers of these birds build together, so much so as completely to whiten the places where they assemble for the purpose, and to give them the appearance of being covered with snow.

The nest is a mixture of grass and other dry herbage, with sea-weed.

The time for laying is the latter end of May, or the beginning of June.

The eggs are usually two, but occasionally, though very rarely, three in number. They differ much in their colouring and markings; the prevailing tint is stone-colour with a tinge of olive, much spotted with grey and brown of two shades; or greyish white, faintly tinged with brown, and blotted with dark brown and purple grey.

Male; weight, about fourteen ounces; length, one foot two to one foot three inches and a half or even four inches; bill, pale yellow, greenish yellow at the tip, the upper mandible rather arched, the inside of the mouth reddish orange colour. Iris, dark dusky brown, the edges of the eyelids reddish orange; head on the sides, crown, neck, and nape, white; in winter the sides around the eye and the back of the head are streaked with dark grey, the nape with bluish or blackish grey. Chin, throat, and breast, white; back, pale bluish grey.

The wings reach in extent from three feet two to three feet four inches; greater and lesser wing coverts, pale bluish grey. Of the primaries, the first has the whole of the outer margin black, the second with the end and the greater part of the outer web the same, the third with its end and still

less of the outer web the same, the fourth and fifth with a black patch near the end, but the extreme tips white. Secondaries, bluish grey, tipped with white; tertiaries, bluish grey, tipped with white; greater and lesser under wing coverts white. Tail, white; upper tail coverts, white; under tail coverts, white. The legs, which are rather short and slight, and somewhat far back, are, as the toes, dusky greenish black or olive. The hind toe is only rudimentary, and hence one of the specific names of the bird. It is without any claw; webs, dusky.

The young at first have the bill black; a spot before the eyes and also behind the ears deep blackish grey; back, deep bluish grey. The tertiaries with part of their outer webs black; the tail, except the outermost feather on each side, with a broad black bar along its end.

In the young after the first autumnal moult the bill is yellow, tinged with blackish green at the tip, the mouth inside pale red; iris, dusky brown, there is a blackish grey spot in front of and behind the eyes, the eyelids grey. The back of the head is blackish grey; on the nape is a broad patch of black, the edges shaded off into bluish grey; chin, throat, and breast, white; upper part of the back, deep bluish grey. Greater and lesser wing coverts, spotted with blackish brown and grey. The three first primaries are black, with the exception of a band of white on the inner webs; the tertiaries are black on the outer webs, the inner paler bluish grey and edged with white. The tail is considerably forked, the outermost feathers on each side are white, the others have a blackish brown bar at the tips about three quarters of an inch wide; under tail coverts, white; legs and toes, deep dull green.

SKUA.

SKUA.

COMMON SKUA. SKUA GULL. SQUAW GULL. BROWN GULL. BONXIE.

Lestris cataractes,	Jenyns. Gould. Temminck.
Larus cataractes,	Pennant. Montagu. Bewick.
Cataractes vulgaris,	Fleming. Selby.

Lestris—A pirate vessel. *Cataractes. Katarasso*—To drive headlong, to dash down.

This stout bird belongs to the colder regions of the north and south, as in Europe to Spitzbergen, Nova Zembla, Iceland, the Ferroe Islands, Norway, and Scandinavia generally; in North America, to Labrador, Newfoundland, Hudson's Bay, and the adjacent parts towards the United States; in South America, to the Straits of Magellan, Terra del Fuego, the Falkland Islands, the New South Georgian Islands, and Kerguelin's Land; also to Africa, at the Cape of Good Hope. Specimens have, however, been obtained in more temperate parts, as on the coasts of Germany, Holland, and France.

In Yorkshire, they are occasionally seen on the coast in the autumn and winter, but are never numerous; one a young bird, was shot in December, 1853, near Scarborough. Sir William Jardine has noticed them at times on the Solway Firth, and far up the Firth of Forth. They similarly appear, wandering southwards in the autumn, on the coasts of Northumberland, Durham, Norfolk, four shot in the Yarmouth Roads, October 7th., 1827, Essex, Kent, one at Greenwich, and another at Sandwich, in the winter of the year 1800, and Sussex. In Cornwall the species occurs, but not commonly, at Falmouth, Penryn River, and other places. Also in Devonshire; in April, 1850, one of these birds was caught near Plymouth in a net, by some fishermen, as R. A. Julian, Esq., Jun., of Laira House, has informed me. One, too, on the River Severn. One on

the Cumberland coast, which allowed itself to be seized when in the act of killing a Herring Gull.

The Skua breeds in Shetland, and has three principal stations there, namely, Foula, the Hill of Rona, in Mainland, and the Isle of Unst. In Orkney it is but an occasional visitant. A specimen was shot near Kirkwall in the winter of 1845-6, and another has since been killed near Stromness.

It is likewise an Irish species, but rare. One in Dublin Bay.

These birds are valued by the inhabitants of the places where they build, as scaring away the Eagles from their flocks; a pair have been seen to drive one from their nest. They are preserved in some of the northern islands on this account. They dash with extreme courage and boldness at any intruder, increasing in the vigour of their attacks as the nest is more nearly approached. Meyer thus writes, 'While the breeding-season lasts, this Skua is exceedingly ferocious, for every intruder, whether man, bird, or beast, is attacked by it, and driven from the locality that it has chosen. Men, when attacked, are obliged to defend themselves stoutly; dogs and foxes are driven off the ground, and the Eagle itself is obliged to take proper warning.'

They have been kept in confinement; one for a period of ten years or more. Many are killed in the north for the sake of the feathers.

The Skua soars at times at a great height, and flies both strongly and rapidly, in an impetuous dashing manner.

They may be considered as a sort of sea-hawk, and feed on fish, and at times on other smaller birds and their eggs. 'They rarely, however, take the trouble to fish for themselves, but watching the Gulls when thus employed, they no sooner observe one to have been successful, than they immediately give chase, pursuing it with fury, and obliging it from fright to disgorge the recently-swallowed fish, they descend after it to catch it, and are frequently so rapid and certain in their movements and aim, as to seize their prize before it reaches the water. It is on this account these birds have been called Parasitic Gulls, because they are supported by the labours of others.' Hence also their other name of Pirate, as shewn above; 'Might versus Right' being their only motto, and that upon whose principle, or what we should call want of principle, they act on every occasion that happens, but still following only the proper instinct of their nature. With reference how-

ever, to this name Bewick observes, speaking of one of the other species, 'It may admit of doubt whether the character of parasitic belongs to any of this tribe, least of all to the present bird. What it obtains from other birds is not by fawning or cunning, but by courageous open assault.' They thus attack even the Gannet. They hold their prey in their claws, and so tear it to pieces. They have, however, been known to swallow a herring whole. They are great favourites with the fishermen, 'frequently accompanying their boats to the fishing-ground, which is considered a lucky omen.'

The nest of the Skua is of a large size, as well as somewhat carefully constructed; the materials used being grasses, lichens, moss, and heath. The bird places it on the tops of the mountains or cliffs in the neighbourhood of the sea, but not on the rocks themselves. They build separately in pairs.

The eggs are only two. They are laid towards the end of June.

Male; weight, about three pounds; length, two feet, to two feet one inch. The bill, which is much hooked at the tip, is dark brownish black. Cere, black; iris, dark hazel brown. Head, crown, neck, and nape, dark umber brown, with slight streaks of yellowish or reddish brown. The feathers of the neck, which are of a pointed shape, are raised by the bird when excited. Chin, throat, and breast, uniform brown; back, dark reddish brown, with lighter coloured oblong spots.

The wings extend to the width of between four and five feet; greater and lesser wing coverts, dark reddish brown; of the primaries, the first has its outer web and tip blackish brown, the others the same on the tips only, and very pale rusty brown at the base of the feathers; the shafts of all of them white and strong. Tertiaries, margined with pale reddish brown. The tail, which is dark brown, is rounded at the end, the two middle feathers a little longer than the others, and darker in colour; the base white. It consists of twelve feathers. Legs, black, strongly and irregularly scutellated in front, and reticulated behind; toes, black. The claws are black, strong, much hooked, and grooved beneath, the inner one the most so.

The female is much less in size than the male, but otherwise similar.

POMERINE SKUA.

POMERINE GULL. POMERINE JAGER.

Lestris pomerinus,	JENYNS. GOULD. TEMMINCK.
" *striatus*,	EYTON.
Cataractes pomarinus,	SELBY.

Lestris—A pirate vessel. *Pomerinus*—.....?

THE Pomerine Skua visits the shores of France and Holland, and one or two are seen every year on the Swiss lakes in the winter. It comes from the north, and is known in Denmark, Sweden, and Norway, where it breeds, Iceland, and in the Faroe Islands.

In America it is not uncommon in Hudson's Bay, Newfoundland, Greenland, and the Arctic regions generally.

A specimen occurred in Derbyshire near the village of Burnaston, September 23rd., 1854: it was driven about, and knocked down by some Rooks. Others in Norfolk, at Blakeney, in December, 1847. The species is of occasional occurrence along the coast, but mostly in the autumn, and generally in the immature state of plumage. One was taken in Sussex in the village of Ovingdean, in October, 1844. 'It had struck down a White Gull, which it would not quit; it was kept alive about a fortnight, and then died. The very first day of its captivity it (is said to have) devoured twenty-five Sparrows. Once it escaped, and immediately attacked a Duck, which it held till re-captured.' Another was obtained at Brighton; one in Kent, at Dover; and one in Lancashire, at Liverpool. In Cornwall, an adult example of this species was killed near Penzance, in Mount's Bay, the beginning of October, 1851.

In Oxfordshire, one occurred near Oxford in February, 1854, and another in November, 1848. One in the collection of the

Rev. Dr. Thackeray, of King's College, Cambridge, is stated by the Rev. Leonard Jenyns to have been shot near Cambridge. Two at Hastings, in Sussex, in the early part of October, 1851. In Yorkshire they have sometimes occurred near Scarborough and along the coast in considerable numbers, that is, young birds, but their visits are very uncertain; three were obtained there by W. H. Rudston Read, Esq., in October, 1831. One has been shot near York.

In the year 1837 many were on sale in the London markets, and eight or ten of them had been caught alive. Two were captured in 1831 in Devonshire; others have been taken on the Suffolk coast. One was shot in Hackney Marshes, near London.

In Scotland, Sir William Jardine has noticed them in the Firth of Forth, and several as high up as Newhaven.

In Ireland they are of occasional occurrence.

They are seen also in the Hebrides. In Orkney one was obtained in, I believe, the year 1832.

They advance southwards in the autumn, and return towards spring.

This bird, like the others, lives a life of rapine, and thrives on robbery, paying no regard to the principles of 'meum' and 'tuum,' but, guided solely by self-interest, avails itself of the labours of others, and plunders them without scruple of their hardly-earned food, which it thus makes its own. It is pugnacious and formidable in the same way, though not in the same degree, as the other species. Only a few are seen together, except in the breeding-season.

Its flight, says Sir William Jardine, is very swift and rapid, as befits one that is of so piratical a character.

This Skua Gull builds by the margin of lakes in marshy places, as well as in more rocky ones.

The nest is composed of different grasses and moss.

The eggs are two or three in number, and of a yellowish grey colour, spotted with blackish brown.

Male; bill, dark greenish grey, black at the tip, and bluish at the base, the inside of the mouth orange red; iris, dark brown. Head on the crown and back, neck on the back, and nape, deep blackish brown, with a slight tinge of grey, the neck on the sides yellowish. Chin, throat, and breast, white, the last-named with a collar of greyish brown spots, and marked on the upper part and sides with yellowish and greyish brown. Back, dark purple brown.

Greater and lesser wing coverts, dark purple brown; the primaries, dusky, have the shafts white. The tail, of twelve feathers, is dark purple brown, the shafts of the feathers white, except the extreme ends. The two middle feathers are three inches longer than the others, but of an equal breadth throughout; the tips rounded; under tail coverts, white, dashed with greyish brown. Legs, bluish black; the toes, black, the hind toe very short, and with a strong nail.

The young of the first year have the bill bluish, the upper mandible rounded, and bent down at the point, which is black; a groove runs along the cere to the base of the bill, and there is also a groove from the base of the lower mandible for half its length; iris, hazel. Crown, neck on the back, and nape, brown, tinged with grey, the feathers margined with pale brown. The feathers of the breast are white at the base, the remainder mottled with brown and yellowish brown—as the bird gets older the white prevails. Back, deep rufous brown, the tips of the feathers yellowish brown, looking like a spot on each side of the shaft.

The wings, when closed, reach an inch beyond the end of the tail; greater and lesser wing coverts, deep rufous brown. The primaries have their shafts and inner webs at the base white, the outer webs and tips black; the secondaries are tipped with yellowish brown. The tail has part of the shafts and the base of the inner webs white, the rest black; the two middle feathers about three quarters of an inch longer than the others, but of the same breadth throughout, and rounded at the ends; upper and under tail coverts, barred across with pale brown and reddish white. Legs and toes, bluish black; the claws much hooked and black.

In another stage the bill at the base is greenish brown, the point, which is curved, black; cere, greenish brown; iris, very dark brown. Head on the crown, the neck, and nape, brown, the feathers, margined with lighter brown; chin, throat, and breast, brown, with narrow transverse waves of paler buff-coloured brown. Back, umber brown, with broad margins to the feathers of a lighter shade, broadest on the lower part. Primaries, blackish brown, the shafts and a considerable portion of the inner webs white; tertiaries, umber brown, broadly margined with paler brown. Upper tail coverts, umber brown, each feather broadly margined with a lighter shade, the middle feathers about half an inch

longer than the next to them; under tail coverts, broadly margined across with two shades of brown. Legs, yellowish; Sir William Jardine remarks that the legs of this species are sometimes pied black and yellow; toes, black, yellowish at their bases; webs, black.

So again the bill is dull black, the point the darkest; cere, dull black. Head, crown, neck, and nape, dull rusty black; chin and throat, rusty black, but paler; breast, with narrow alternate stripes of dark and light brown; back, rusty black, the feathers margined with brown, which markings gradually become broader as they go down to the tail coverts, whereon they are darkest. The primaries have the shafts white. Tail, rusty black, the central feathers elongated; underneath, whitish at the base, increasing to dark lead-colour; under tail coverts, mottled with brown bars. Legs, dark lead-colour, with a tinge of vivid blue; toes, black.

RICHARDSON'S SKUA.

ARCTIC SKUA. ARCTIC GULL. ARCTIC BIRD.
BLACK-TOED GULL.

Lestris Richardsonii,	Jenyns. Gould.
" *crepidatus*,	Temminck.
Cataractes parasiticus,	Fleming. Selby.
Larus parasiticus,	Linnæus. Gmelin. Pennant.
" "	Montagu. Bewick.
" *crepidatus*,	Pennant. Montagu. Bewick.
Stercorarius Cepphus,	Stephens.
" *longicaudus*,	Brisson.

Lestris—A pirate vessel. *Richardsonii*—Of Richardson.

This Skua Gull, which, as will be seen on a reference to the synonymic names, was formerly supposed, in different stages of its plumage, to compose more than one species, is common in Europe—in Sweden, Norway, Denmark, the Feroe Islands, Spitzbergen, Scandinavia, and other parts of the north. Some have occurred on the coasts of Holland and Belgium, as reported by M. De Selys Longchamps. In Asia—in Siberia and Kamtschatka. Also in North America—in Greenland, and on the coasts of Newfoundland, Labrador, and Hudson's Bay.

With us they breed in several of the Orkney and Shetland Islands, as Hoy and the Holm of Eday of the former; Noss, Unst, and Foula, of the latter; so too in the Hebrides, Islay, Jura, Uist, and Rum.

Several examples have occurred on the shores of various counties in England, also inland. In Norfolk a young one was shot at Lynn, in the estuary of the River Ouse, about the 1st. of October, 1854; one also, in the plumage of the second year, near the same place, September 16th., 1852. Two at Hunstanton, on the 11th. of the same month. One at

Yarmouth, in immature plumage, about the 24th. of October, 1844, and in 1847 four, two adult and two immature ones, on different parts of the Norfolk coast. In Oxfordshire several individuals have occurred, at different times, in the neighbourhood of Weston-on-the-Green. One adult bird was seen there on the 27th. of June, 1837. The Hon. T. L. Powys has informed me of one of these Skuas, an immature specimen having been obtained near Oxford. In Sussex, one was shot near Brighton, on the 23rd. of January, 1851. In Worcestershire, one on the Severn, near Worcester, about the beginning of November, 1849; and one in Lancashire, the same year, near Fleetwood, on the 20th. of August. In Yorkshire, one was picked up in the town of Halifax, in the West-Riding. This species is noticed occasionally on the coast, and sometimes in considerable numbers, namely, young birds for the most part; so also in Durham, Hampshire, Devonshire, and Lancashire. One at Battersea, near London, and four at Kingsbury, in Middlesex, in the autumn of the year 1842. In the county of Northumberland Mr. Selby records the occurrence of two at the Fern Islands, in the month of May.

In Scotland Sir William Jardine observed this species in Sutherlandshire, on the Firth of Durness, in the month of June, 1834. He also states that it is frequently observed, late in the autumn, in the Frith of Forth.

In Ireland individuals have occurred, but rarely, as near Belfast and Dublin; one in May, 1847.

In Orkney two, in the plumage formerly described as a different species, were shot in Sanday, in the winter of 1849-50; one subsequently. These birds are very abundant in summer, and breed in Hoy and several parts of the islands; as also in like manner, as already mentioned, in the Hebrides and the Shetland Islands.

They are migratory, some of the young birds advancing southwards in the autumn. They arrive in Shetland in May.

When anxious for the safety of their nest or young, these birds exhibit the greatest solicitude, flying, running, and fluttering about with obvious care, or pretending to be lame, and endeavouring to decoy intruders away. They appear to do well in confinement. They are said to have combats sometimes among themselves.

The Arctic Skua is also amazingly swift and powerful on the wing, a necessary qualification in such a pirate. Meyer says that occasionally it flies as slow, and that there is hardly

a bird whose flight is more varied, or kept up for a greater length of time without taking rest. On the shore it runs about briskly, and occasionally rests itself on the sea by swimming.

They plunder other sea-birds of their eggs, like the kindred species, pursuing the owners thereof in the air when they see any food procured by them, forcing them to drop the prey they have captured, and then seizing it themselves, their motto being 'Le droit de plus fort.' They thus attack and rob even the great burgomaster, as well as the inferior Kittiwake and the Terns. They also pick up insects, small birds and their eggs, and other food.

The note is a loud harsh cry or squall, the origin, I should suppose, of the name of the bird.

These birds build both separately and in companies—twenty, thirty, or forty pairs together. They make their nests on some raised part of a marshy place, or the top of an upland moory waste; the heath, moss, lichens, or grass thereon being embedded into a nest.

The eggs are two in number. They are laid early in June. They are of an olive brown colour, spotted with dark brown.

The Arctic Gull is a bird of very neat and even elegant appearance.

Male; length, one foot ten inches; bill, bluish at the base, which is broad, and nearly black at the tip, which is hooked, and black also on the under mandible, which is slightly angular and grooved on the sides for two thirds of its length. Cere, bluish; iris, chesnut brown. Forehead, pale yellowish; head on the sides, pale yellowish, on the crown, dark dusky brownish grey; neck on the sides and nape, pale yellowish, the feathers on the back part of the neck being stiff and pointed, and forming a sort of collar around it; chin and throat, pale yellowish; breast, yellowish white, passing on the lower part and sides into greyish brown; back, dusky grey.

The wings reach only a little beyond the side feathers of the tail; greater and lesser wing coverts, dark dusky grey; primaries, dark dusky grey, the tips the darkest, the shafts almost white nearly to the tip. Tail, dark dusky grey, the shafts almost white nearly through their whole length; the central feathers, which are pointed at the ends, are three inches longer than those next on either side; under tail coverts, dark dusky grey. Legs and toes, blackish, blotted with yellow. The fronts are scutellated, the hinder parts

reticulated with small pointed scales. Webs, blackish, blotted with yellow.

The female is as the male.

The young are at first covered with down, of a beautiful light brown colour, spotted and barred with black, the former gradually wearing out. In the first year's plumage the bill, which is curved at the point, is black on that portion, and the remainder brownish grey, as likewise the cere; iris, dark brown. Head, crown, neck, and nape, pale yellowish brown, streaked with dark brown, the most so on the hinder part of the sides of the head, and of the neck. Chin and throat, pale yellowish brown, streaked and mottled with darker brown; breast, pale yellowish brown, barred across with darker brown. Back, deep brown, the feathers tipped with yellowish. Greater and lesser wing coverts, deep brown, margined with pale yellowish brown; primaries, dusky brownish black, tipped with pale brown, and part of the inner webs white, as also the shafts; tertiaries, brown, margined with paler brown. Tail, deep dusky brown at the base, the remainder brownish black, and the two middle feathers half an inch longer than the others; the whole number of feathers is twelve. Under tail coverts, pale yellowish brown, barred with darker brown. The legs, at first black, become yellowish white and blue; the toes, also at first black, turn to yellowish white at the base, the remainder black; webs, yellow at the base, and the front black, whence the name to the species of the Black-toed Gull.

BUFFON'S SKUA.

ARCTIC JAGER. BOATSWAIN.

Lestris Buffonii,	Boie. Meyer.
" "	Buonaparte.
" *parasiticus,*	Jenyns. Eyton. Gould.
" *crepidatus, (young)*	Temminck.
Cataractes parasiticus,	Fleming.
Stercorarius Cepphus,	Shaw.
" *longicaudus,*	Brisson.
Larus parasiticus,	Linnæus.
" *crepidatus, (young)*	Gmelin. Latham.
Cataractes Cepphus,	Brunnich. Ray.

Lestris—A pirate vessel. *Buffonii*—Of Buffon.

This species has been named after M. Buffon, the celebrated French naturalist.

Many of these birds are seen in North America, about Baffin's Bay, Melville Peninsula, and the North Georgian Islands.

Specimens have been procured in different parts of France and Belgium, and they occur also in Norway, Iceland, and Spitzbergen.

In Yorkshire an individual of this kind was taken near Redcar, on the 20th. of July, 1849; another, I believe, near Bridlington Quay, and another at Flamborough. One in Devonshire, near Plymouth, as John Gatcombe, Esq. has written me word. Another was shot by George Dawson Rowley, Esq., at Wintringham, St. Neots, Huntingdonshire, on the 20th. of October, 1848; it was sitting in an arable field, and was very tame. The remains of a dead bird, apparently its mate, were also found not far off. In Norfolk, a specimen was picked up dead at Hockham, in September, 1847. In Durham, an adult bird was found near Whitburn,

BUFFON'S SKUA.

at the end of October, 1837, and young ones on other parts of the coast and the banks of the Tyne.

In Scotland one of these birds was obtained at Bonar Bridge, in August, 1841.

In Ireland they have likewise occurred, but as rare visitants; one in 1839, near Dublin.

They also are seen in Orkney.

This is another very elegantly-shaped species, its whole form and contour giving evidence of its character as a sort of predatory Sea Swallow, a very Harpy of the deep, but one which, unlike the pests of that name described by Virgil, reverses the order of things as to the 'dapes,' and does not spoil the morsel so as to hinder its being swallowed by those among whom it comes unbidden and unwelcome, but pounces on the spoil all the more eagerly, for that the others have first made it their own by what would naturally be thought the most secure mode of appropriation.

It flies no doubt in the same free and easy manner as the other species.

So likewise as to the manner of taking its food.

This Skua Gull breeds on the shores of the sea, and those of the larger rivers, as also on barren heaths at some distance inland: many birds build together. The nest is composed of dry grass.

The eggs are in number two, of a pale olive green colour, with irregular blots of grey and dark reddish brown.

Male; length, one foot one inch and a half; the bill, curved at the point, is black at the end, the base dark greenish brown; cere, dark greenish brown; iris, brown. Head on the crown, black; neck on the sides and nape, pale yellowish white; chin, throat, and breast on the upper part, white, below light brownish grey. Back, brownish grey; greater and lesser wing coverts, brownish grey; primaries, nearly black; tertiaries, brownish grey. Tail, nearly black; upper tail coverts, brownish grey; under tail coverts, light brownish grey. The middle feathers, which are very long and pointed at the ends, extend nine inches beyond the others. Legs and toes, black with a tinge of yellow; webs, black.

CINEREOUS SHEARWATER.

GREATER SHEARWATER. DUSKY SHEARWATER.
HACKBOLT. HAGDOWN.

Puffinus cinereus,	Selby. Eyton. Gould.
" *fuliginosus*,	Eyton.
" *major*,	Temminck.
Procellaria puffinus,	Jenyns.
" *fuliginosus*,	Jenyns.

Puffinus—.....? *Cinereus. Cinereous*—Ash-coloured.

This species has been noticed in Iceland, and appears to be common on the coast of Spain, and in other parts of the Mediterranean. In America it is very abundant at Newfoundland, where it breeds. It has been procured also in Africa, on the southern coast.

In Yorkshire one of these birds was taken alive in a fishing net, at Robin Hood's Bay, near Whitby, in the North Riding. One was shot by Mr. George Marwood, Jun., of Busby Hall, in Cleveland, at the mouth of the River Tees, in the middle of August, 1828. Another also near Robin Hood's Bay, and one or two near Burlington Quay. One was taken alive in Leeds, October 6th., 1854, as recorded by Dr. Hobson, in 'The Naturalist,' volume v., page 144. In Northumberland one, a young bird, on the coast. W. P. Cocks, Esq. has recorded this species as rare in the neighbourhood of Falmouth, Cornwall, in 'The Naturalist,' vol. i., page 140. He also writes me word of two he saw at St. Ives, in the year 1843. Many were seen in Mount's Bay, and three taken; one at Newlyn, near Penzance, in November, 1839; one the previous year. Thousands are seen some autumns off Looe and Polperro. Several specimens have occurred at different times on the Devonshire coast.

Mr. Thomas Southwell has informed me that one of these

Shearwaters, in immature plumage, was caught by a boy at the mouth of the River Ouse, near Lynn, on the 25th. of July, 1851.

In Orkney one was procured from the Island of Foula, in the year 1853, as related in a note to me from Dr. Baikie, supplemental to the Natural History of Orkney by himself and Mr. Heddle. Mr. J. J. Watters, Jun., in his 'Catalogue of the Birds of Ireland,' mentions it as occurring, but rare. Two were taken in the autumn of 1839, off Dungarvan Bay.

These birds are of crepuscular or twilight habits.

They are kept in confinement without difficulty, if supplied with suitable food and water. On the ground they walk and run about with the body near the ground. In flight they skim close over the surface of the water, whence their appropriate name.

They feed on fish, sea-worms, and other marine insects.

This Shearwater is of very plain and dull plumage, and even in the summer season, when all birds put on their best, the gayest apparel that it dons, 'la haute toilette,' is sober and unpretending. Male; length, one foot six inches; bill, dark brown, the under mandible paler at the base: there is a double tube on the upper one, from whence the bill rounds slightly upwards, and then tends down in a deep hook, the points of both mandibles being bent downwards. Iris, dark brown; head on the crown and back, dark ash grey; neck on the back, and nape, greyish white; chin, throat, and breast, white, the latter on the lower part varied with dull greyish brown. Back, ash grey, the margins of the feathers lighter.

Greater and lesser wing coverts, ash grey, the edges of the feathers paler; primaries, blackish brown; tertiaries, ash grey, the edges lighter coloured. Tail, blackish brown; upper tail coverts, a mixture of dull white and greyish brown. The legs, which are placed far backwards, are much compressed laterally, they, as the toes, are brownish yellow; hind toe rudimentary; webs, brownish yellow.

In the female the length is a little over one foot five inches; bill, dark brown, the base of the lower mandible paler; iris, dark brown; head, crown, neck, and nape, dark brown; chin and throat, greyish brown. Breast, greyish brown, the feathers darker on the edges. Back, dark dusky brown. Greater and lesser wing coverts, dusky blackish brown; primaries, dusky blackish brown; tertiaries, dark brown, the edges paler. Tail, blackish brown; legs, deep greyish brown

on the outer part, paler on the inner, and of a yellowish hue; toes, yellowish brown; webs, yellowish brown.

Young; length, one foot five inches; bill at the tip, dark brown; iris, dark brown; head, crown, and neck on the back, dark brown, the feathers rather darker on the margins than in the centre; chin, throat, and breast, greyish brown, the feathers much darker on the margins than in the centre; back, dark brown. The wings have the first quill feather the longest; greater and lesser wing coverts, brown; primaries, blackish brown; tertiaries, brown. Tail, blackish brown. Legs, on the outer surface, dusky, inner surface, light brown; toes, light brown.

MANX SHEARWATER.

MANX SHEARWATER

MANX PETREL. MANX PUFFIN. SHEARWATER PETREL. SKRABE. LYRE.

Puffinus Anglorum,	FLEMING. SELBY. GOULD.
Procellaria puffinus,	PENNANT. MONTAGU.
" *Anglorum*,	JENYNS. TEMMINCK.

Puffinus—.....? *Anglorum*—Of the English.

THE present, as a European species, has occurred in the Mediterranean, Norway, the Islands of Denmark, the Faroe Islands, Iceland, Holland, Italy, and France. In America it extends in its range from Labrador, down by Newfoundland to the south, through the States. In Asia, it has been noticed in Asia Minor. It is included also among the birds of Madeira.

This bird was formerly very plentiful in the Isle of Man, whence its name.

The Manx Shearwater breeds in the Hebrides, at St. Kilda and Soa; also in Zetland, at Foula and Unst. In Orkney, in the Islands of Papa Westray and Waas.

In England, on Annet, one of the Scilly Islands, and on the coast of Wales. Many which are on sale in Leadenhall market in the spring of the year, are taken in rabbit-warrens in Wales, Mr. John Dutton writes me word.

In Yorkshire specimens of this bird are occasionally found along the coast in the autumn. It has also occurred near Yarmouth, but rarely. One or two off the Northumbrian coast, near the Fern Islands. Specimens have been seen off the shores of Dorsetshire and Devonshire. In Oxfordshire

one was taken alive near Chipping Norton, September, 1839.

In Ireland they are summer visitants, near Dublin and other parts, but locally.

They occur, as just mentioned, in the Orkneys, but not very numerously; also in the Hebrides.

They are migratory birds, arriving in the north in February and March, and departing in the autumn.

In their habits they are somewhat addicted to the twilight, flying abroad when the 'stars glimmer red,' to take their pastime, and seek their daily food.

They roost with the head turned back, and the bill buried in the feathers. They are altogether birds of the sea, except when drawn to land for the purpose of breeding. Flocks of as many as three hundred have been seen together, and they appear to be easily approached. Meyer writes, speaking of their mode of feeding, 'It is very amusing to watch a flock of these Petrels thus employed; the birds are seen swimming on the waves with their heads in the water, all in the same direction, and moving on very rapidly, the hindermost bird always flying up and settling in advance of the foremost, like rooks following a plough. Fishermen, when in pursuit of their calling, watch carefully the movements of these birds, and when they see them thus employed, lower their nets with a tolerable certainty of finding the shoals, of which they are in search, near the surface.'

The eggs and young are in considerable request in the places where they occur, but the natural consequence is, or rather has been, a great decrease in their numbers in places where they used formerly to abound.

They swim low in the water, and have the same habit as the other, of seeming to run along the top of the waves, scudding lightly over them, and at times, as it were, supporting themselves on their feet to pick up food.

They feed on fish—sprats, anchovies, and others, shrimps, cuttle-fish, worms, and other marine productions, and with these converted into an oil the young are fed. It is also made use of as a means of defence, blown from the tubular nostrils.

These birds resort for the purpose of incubation to the highest grassy parts of small rocky islands and the kindred shores of the mainland, as also to sandy places, where they breed in burrows, going to the depth of about two feet. The excavating of these appears to occupy a considerable time.

Both birds sit, and that so closely, as to allow themselves to be taken in the hand.

They seem to be very variable in the time of laying, from the end of May to the end of June.

The nest is at most and best but a slight collection of fern leaves and withered stems of other plants: frequently none is formed, but the sand alone suffices the bird.

Only one egg is produced; it is large in size in proportion to the bulk of the bird, perfectly white, and of an oval form, but both ends obtuse.

Male; weight, seventeen ounces; length, one foot two to one foot three inches. The bill, which is furrowed above with a double tube, is blackish brown, the base lighter coloured and of a yellowish brown tint, the tips of both mandibles much hooked downwards; iris, dark brown. Head on the sides and crown, neck on the back, and nape, dusky brownish black, with a slight tinge of grey and a glossy lustre, the sides of the neck mottled with grey and white. Chin, throat, and breast, white, below on the latter behind the legs is a brownish black streak. Back, dusky brownish black, with a slight tinge of grey, and a glossy lustre.

The wings, when closed, reach nearly to the end of the tail: they expand to the width of two feet seven inches. Greater and lesser under wing coverts, white; primaries, black; tail, brownish black; under tail coverts, white. Legs, brown behind, in front dull yellowish red; they are laterally compressed; the outer toe brown, the remainder dull yellowish red; the webs rayed with brown.

The young bird is at first covered with greyish black down, except a stripe along the centre of the breast, which is white.

In the bird of the first year the breast is of a deep ash grey, the upper plumage dusky brown, which becomes by degrees darker.

DUSKY PETREL.

Puffinus obscurus,	Gould. Temminck.
" "	Buonaparte. Degland.
Procellaria obscura,	Temminck.

Puffinus—.....? *Obscurus*—Obscure.

The present species is common on the western coast of Africa to the Cape of Good Hope, and occasionally occurs on the coasts of the Mediterranean. It belongs also to the Canary Islands and to Madeira. A breeding-place is on the Dezertas, a group of small islands near it, as stated by Edward Vernon Harcourt, Esq. A few have occurred in France and Italy. It was obtained by Captain Cook, at Christmas Island. In America it is given by Nuttall as belonging to Canada, and on by the States to the Gulf of Mexico, Florida, and Georgia, and other parts; also in Bermuda.

A specimen of this Petrel flew on board a small sloop, near the Island of Valentia, off the south-west coast of Ireland, late in the evening of the 11th. of May, 1853.

They are very tameable birds.

They are able in flight, and skim low over the sea in search of food, and, says Audubon, on approaching a mass of weeds, raise their wings obliquely, drop their legs and feet, run as it were on the water, and at length alight on the sea, where they swim with much ease and dive freely, at times passing several feet under the surface. Whenever an individual settles in a spot, many fly up directly and join it.

They appear to make use of the bill to assist them in climbing up rocky places. They roost in the daytime in crevices and under stones, namely, when on the land, reposing otherwise on the bosom of the deep, and coming forth towards evening to prowl and prey, the dim light of the

DUSKY PETREL.

'cold pale moon' being more suitable to their habits than the bright glare of the sun.

They feed on fish, and almost any kind of food.

The egg, for one only is laid, is pure white.

Male; length, eleven inches; bill, bluish black; the tooth curved and shining black; iris, brown. Head on the sides, below the level of the eyes, white towards the back, where, and on the sides of the neck, the black and white commingle in grey, slightly in the form of bars. Head on the crown and sides, neck on the back, and nape, black. Chin, throat, and breast, white; the last-named somewhat dusky behind the legs. Back, black.

The axillary plume is white. Greater and lesser wing coverts, white; primaries, secondaries, and tertiaries, black; the primaries are blackish grey underneath, darkest near the shaft of each feather, being lighter in colour over the outer part of each broad inner web. Tail, black above, underneath uniform leaden grey; upper tail coverts, black; under tail coverts, white. Legs, much flattened at the sides, blackish grey; toes and claws, blackish grey; webs, reddish brown.

CAPPED PETREL.

WHITE-HEADED PETREL.

Procellaria hæsitata, FORSTER. KUHL. TEMMINCK

Procellaria. *Procella*—A storm. *Hæsitata*—A fictitious word from *hæsito*, to doubt—doubted about.

THIS Petrel has occurred occasionally in different and widely-separated parts of the world, the Azores or Western Islands; the Australian Seas, the Indian Ocean, and the South Seas.

Mr. Yarrell's account of the first British specimen of this bird, taken from the source presently mentioned, is as follows:—'The Petrel represented above, was observed by a boy on a heath at Southacre, near Swaffham, in Norfolk, flapping for some time from one furze bush to another; at length it got into one of the bushes, and was there secured by him. Mr. Newcome, of Hockwold Hall, near Brandon, fortunately happened at the time to be hawking in the neighbourhood of Swaffham, and his falconer, John Madden, observing the boy with the dead bird, procured it from him, and brought it to his master. This was in the spring of 1850, either in the month of March or April.'

The food of all the Petrels appears to be any thing that can possibly be eaten. 'Chacun à son gout;' and theirs is to have no taste for any one thing in preference to another.

Female; length, about one foot four inches; bill, black; iris, hazel brown. In front of and below the eye are a few greyish black feathers, the latter spreading backwards, the orbits surrounded with a ring of light brown. Forehead and sides of the head, greyish white; head, crown, neck on the

CAPPED PETREL.

back, and nape, white at the base of the feathers, the remainder broadly tipped with brown, the latter colour alone shewing, except at the base of the patch. Chin, throat, and breast, white, the latter has a few dark feathers on the flanks; back, a mixture of blackish brown and brownish grey, the feathers white at the base.

The wings have the first quill feather the longest; they reach when closed beyond the end of the tail. Greater and lesser wing coverts, blackish brown, bordered with a lighter shade of the same, the edges of the middle and lower ones forming two light-coloured bars across the wing; primaries, blackish brown, the shafts of the same colour. Greater and lesser under wing coverts, white. The tail, which is rounded or wedge-shaped, consists of twelve feathers, the outer pair white, edged and broadly tipped with blackish brown, the next four pairs like these, but only slightly edged, the tips of each pair being darker as they approach the middle; the shafts of all white, except the middle pair, which are brownish black except at the base, and have the shafts of the former colour. Upper tail coverts, white, and elongated; under tail coverts, white, with a little grey. Legs, dusky yellow; toes, dusky yellow at the base, the remainder black; claws and webs, black.

The above account is compiled from that given in the 'Zoologist,' page 3691, by Alfred Newton, Esq., of Elvedon Hall, near Thetford, Norfolk.

FULMAR.

FULMAR PETREL. PETREL FULMAR. NORTHERN FULMAR. MALLEMOKE. MOLLY.

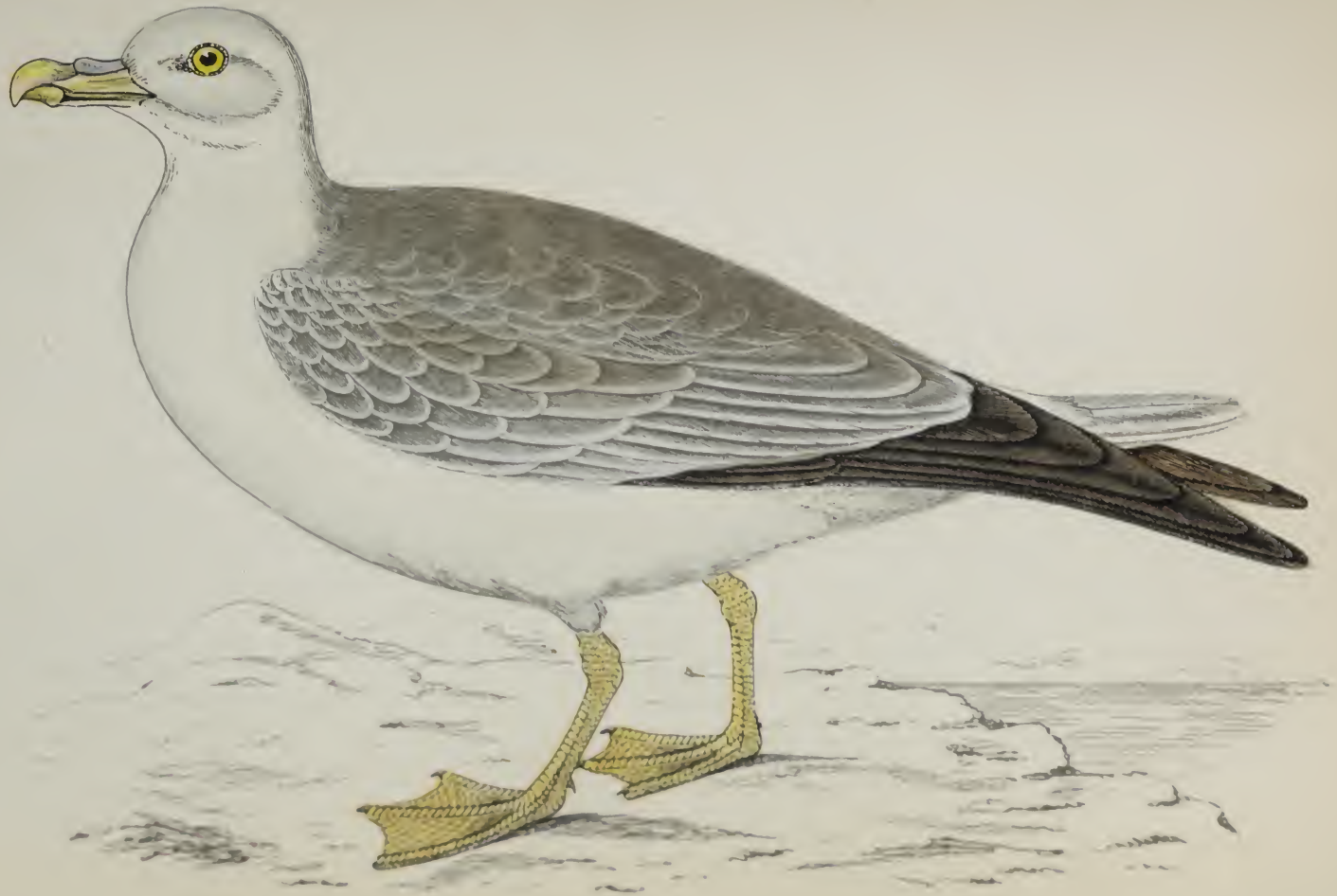
Procellaria glacialis,	Linnæus. Gmelin.
" "	Latham. Sabine. Fleming.
" *cinerea*,	Brisson.
Fulmarus glacialis,	Stephens.

Procellaria. *Procella*—A storm. *Glacialis*—Belonging to ice.

As regards Europe, these birds are plentiful in Iceland, the Ferroe Islands, and Spitzbergen, and have occurred also on the coasts of France and Holland. In America, they are found about Davis' Straits, Baffin's Bay, Hudson's Bay, Newfoundland, the Bay of Fundy, and Greenland, at Grimsey Island.

The Fulmar breeds on Barra, Borrera, and Soay, in the Hebrides, as also at St. Kilda's 'lonely isle,' where they abound in almost incredible numbers, and are said to be the most important to the inhabitants of all their natural productions. Pennant remarks, 'No bird is of such use to the islanders as this: the Fulmar supplies them with oil for their lamps, down for their beds, a delicacy for their tables, a balm for their wounds, and a medicine for their distempers.' The inhabitants frequently risk their lives in order to obtain their eggs also, as well as the birds themselves.

In Norfolk, the Fulmar has been occasionally shot in Yarmouth Roads; two were taken twenty miles at sea, December 18th., 1844. Some few specimens on the coast of Durham. In Essex, one was obtained at Saffron Walden. In Yorkshire, one was shot at Burlington, in 1849; the species was said not to have occurred there before for forty years. Some



FULMAR.

have been shot in Cornwall. In the county of Derby, one was killed October 25th., 1847, in a field near a pool at Melbourne; it had first alighted on an island in the middle of the water. In Oxfordshire, one was found alive in Weston wood, in the parish of Weston-on-the-Green, on the 20th. of February, 1829; another killed on Port-meadow, near Oxford, in May, 1836. It has occurred occasionally also on the Welsh coast. So also in Ireland, but considered extremely rare.

In Orkney, it appears but rarely; a specimen was shot on the loch of Græmeshall in Holm, in the month of September, 1846; one at Scalpa, near Kirkwall, in the year 1849.

It is said to be a regular winter visitant in Zetland.

The Fulmar migrates southwards in the autumn.

They are sometimes eaten, but are only indifferent food. They are pugnacious among themselves when assembled together in countless flocks, as they are seen sometimes to prey on any common food, and also very fearless at such times, as for instance, when a whale has been struck, mingling among the men, so as even to require to be thrown out of the way. They are partly nocturnal in their habits, like the others. If in danger, they defend themselves with their powerful bill, and also forcibly eject from it an oil which acts as some protection.

'They are strong and graceful on the wing, flying almost in the teeth of the strongest gale, without any seeming movement of their beautifully-rounded pinions; now swooping along in the troughs of the sea, now skimming on the snowy crests. They are almost constantly on the wing night and day, never alighting on the water except during calm and moderate weather, and then but rarely. They are very bold, flying close to the side of the ship, almost within reach of the hand.' They walk in an ungainly manner when on the land or the floating masses of ice.

They feed voraciously on anything in the shape of food that floats on the water, and when satisfied, sleep on the ice till again called by their appetite to seek for more. The young are fed on an oil, into which these different substances are converted.

The noise that a large flock makes is described as almost deafening, 'something between the cackle of a hen and the quack of a duck.'

The Fulmar builds on the small grassy shelves that occur on the front of high and inaccessible precipices, the result of

the dilapidations that time works in even the hardest rock. Numberless pairs of these birds build close together.

A slight hollow in the turf, lined with grass and tufts of the sea-pink, form the nest.

The single egg is of very large size, white, and of a brittle texture.

The young are hatched about the middle of June, the the eggs having been laid the beginning of that month.

Male; weight, about twenty-two ounces; length about one foot seven inches; bill, whitish on the sides, the upper part of the upper mandible greyish white, the tip of the lower one yellowish: it is much and strongly hooked, and also toothed; iris, pale yellow. Head, crown, and neck, white; nape, greyish; chin, throat, and breast, white, with a tinge of pink; back, bluish grey.

Greater and lesser wing coverts, fine bluish grey; primaries, slate grey; secondaries and tertiaries, fine bluish grey; greater and lesser under wing coverts, white. Tail, grey, with white edges to the feathers, rounded at the end, which is paler; tail coverts, white, and reaching beyond the end of the tail. Legs and toes, brownish yellow, tinged with red; the hind toe is very short; claws, slender, curved, and pointed; webs, brownish yellow.

The young in the second year have the tip of the bill yellowish, the remainder greyish; iris, pale dusky; there is a dark spot before it. Head, crown, neck, and nape, greyish brown, the edges of the feathers lighter-coloured; back, darker greyish brown, the edges of the feathers paler. Primaries, secondaries, and tertiaries, greyish brown. Tail, greyish brown, the edges of the feathers paler. Legs and toes, pale brownish or greyish yellow; webs, pale brown.

BULWER'S PETREL.

BULWER'S PETREL.

Procellaria Bulwerii, JARDINE. SELBY.
Thalassidroma Bulwerii GOULD.

Procellaria. *Procella*—A storm. *Bulwerii*—Of Bulwer. Bulwer's

THIS species appears to have been discovered as a new one by Mr. Bulwer, when a resident in Madeira. It inhabits that and the adjacent small islands.

As a British Bird, it takes its place on the authority of the occurrence of a specimen on the banks of the River Ure, or Yore, near Tanfield, and which was placed on record by Colonel Dalton, of Sleningford Hall, near Ripon. Meyer speaks of having been informed of another obtained near York, and a third taken on a ship off Scarborough.

In flight it may readily, from the nature of its habits, be supposed to excel.

Its note is, no doubt, of the same 'leggiardo' character as that of the other species.

Male; length, from ten and a half to eleven inches; bill, black; iris, dark brown, nearly black. Head, crown, neck, nape, chin, and throat, sooty black; breast, sooty black, with a slight tinge of greyish brown; back, nearly uniform sooty black. Greater wing coverts, sooty black, the edges rather paler; lesser wing coverts, primaries, secondaries, tertiaries, and greater and lesser under wing coverts, sooty black. The tail is also sooty black, and consists of twelve feathers arranged in a wedge-shaped form, the centre plumes being two inches longer than the outside ones; tail coverts, sooty black. Legs, toes, and claws, dark reddish brown; webs, dark brown.

WILSON'S PETREL.

Procellaria Wilsoni, JENYNS.
Thalassidroma Wilsoni, TEMMINCK.

Procellaria. *Procella*—A storm. *Wilsoni*—Of Wilson.

THIS Petrel was first described as an European one by the Prince of Canino, Charles Lucien Buonaparte. One was obtained from the Azores or Western Islands; it is said to have also occurred on the coast of Spain. In America, it is seen on the coast of Florida, and is plentiful about Charleston, in the United States, and breeds in Nova Scotia; it is also common on the coasts of Chili and Brazil. It is stated by Meyer to have been found at the Cape of Good Hope, and on the coast of North Africa.

Two specimens were captured in the British Channel by the captain of a ship. Another is said to have been taken at Salthouse, in Norfolk, some years since. One was found dead in a field near Polperro, in Cornwall, in the month of November, 1838. The occurrence of another was recorded by T. C. Heysham, Esq., of Carlisle; and one in Sussex, by Mr. F. Bond.

'Like the other Petrels, this species remains in or near its nest or burrow during the day, and goes in search of food on the approach of evening.'

The present, like some of the kindred kinds, follows in the wake of ships in stormy weather, either for the sake of what small shelter may there be afforded, or to pick up any chance morsels of food thrown overboard.

Sailors, always, as it would seem, prone to superstition, deem Mother Cary's bewitched Chickens to forerun a storm; 'but,' says Wilson, 'as well might they curse the midnight lighthouse that, star-like, guides them on their watery way, or the

WILSON'S PETREL

buoy that warns them of the sunken rocks below, as this homeless wanderer, whose manner informs them of the approach of the storm, and thereby enables them to prepare for it.'

It is quick and lively in flight. Audubon says, 'It keeps its wings nearly at right angles with its body, and makes considerable use of its feet, particularly during calm weather, when it at times hops or leaps for several feet, or pats the water, whilst its wings are extended upwards with a fluttering motion, and it inclines its head downward to pick up its food from the water; and I have observed it immerse the whole head beneath the surface to seize on small fishes, in which it generally succeeded. It can walk pretty well on the deck of a vessel, or any other flat surface, and rise from it without much difficulty.'

Its food consists of small fish, mollusca, crustacea, and sea plants.

'Its notes resemble the syllables 'kee-re kee-kee,' uttered 'tempo commodo.' They are more frequently emitted at night than by day.'

These birds appear to build in numbers, about the beginning of June, on sandy islands, in which they burrow small holes to the depth of two feet or two and a half: the necessary bedding provided is a little grass.

The egg is a single one, and its colour white.

The young are able to go to sea by the beginning of August.

Male; length, seven inches and a half; bill, black; iris, dark brown. Head, crown, neck, and nape, dark brownish black: chin, throat, and breast, sooty black, the latter towards the tail white on the sides; back, dusky black, on the lower part, uniting with the tail coverts, white. Greater wing coverts, dark rusty brownish black; primaries, dark brownish black; secondaries, dark rusty brownish black, lighter coloured near the end, and the extreme edges and tips white. Tail, dark brownish black, the base of the three outer feathers white; upper tail coverts, white; under tail coverts, sooty black, but some of them tipped with white. Legs, long and slender, and, as the toes and claws, black; webs, black with an oblong-shaped greyish yellow patch on each.

The female resembles the male in appearance.

LEACH'S PETREL.

FORK-TAILED PETREL. FORK-TAILED STORM PETREL. BULLOCK'S PETREL.

Procellaria Leachii,	Bewick. Jenyns. Temminck.
Thalassidroma Leachii,	Gould.
Bullockii,	Selby. Eyton.

Procellaria. *Procella*—A storm. *Leachii*—Of Leach.

The Fork-tailed Petrel was formerly esteemed a very rare bird, but many have since occurred to reward habits of attention and observation.

A few have been obtained in France, Holland, and Belgium. In America, it is common on the banks of Newfoundland and some parts of the coasts of the north.

Several examples of this species were procured in England in the autumns of 1823, 1825, and 1831; in the first-named of these years, one, said to have been caught on the Essex coast, was bought in Leadenhall Market, London. In Dorsetshire, I once obtained one found dead near Charmouth. In Worcestershire, where one had been found before, a specimen was shot near the city of Worcester, November 12th., 1849. In Warwickshire, one, a male, was found dead on the estate of J. R. West, Esq., of Alscot, near Stratford-on-Avon; five others in the same county in previous years. In Norfolk, three were seen near Lowestoft, on the 28th. of November, 1849, and one, a male, shot at Yarmouth a day or two after, as another had been in the middle of October; a specimen was found on the beach near that town, December 25th., 1823; another, a female, on Caistor beach, near there, on the 4th. of December in the same year; also one found dead on a warren. In Devonshire, a Fork-tailed Petrel was picked up

LEACH'S PETREL.

on the shore near Tor Abbey, in December, 1849; one near Plymouth, in December, 1856, of which John Gatcombe, Esq., of Wyndham Place, has written me word; on January 4th., 1850, one was taken alive, but in an exhausted state, on the highroad between Edgware and Stanmore. One of these birds was found on one of the high downs near Seaford, Sussex, of which R. V. Dennis, Esq. has informed me, and of four others about the same time near Brighton; another picked up dead on or about the 6th. of November, 1850; one at Rottingdean, taken alive, December 14th., 1848. In Oxfordshire, one was found dead in the winter of 1850-51, at Blenheim Park, near Woodstock, the seat of His Grace the Duke of Marlborough; another in the parish of Weston-on-the-Green, in February, 1838, others also; one shot near Henley, in the year 1847; one also at Chipping Norton. In Durham, one, obtained by the Rev. A. Shafto. One in the county of Hereford. In the county of Cumberland, one was taken in a net in the Solway Firth, in November, 1841; also in Derbyshire; and in Cambridgeshire one at Bassingbourne.

In Hampshire, one was found dead in the year 1850, at Luccombe Chine, in the Isle of Wight. Several near London; Mr. Yarrell bought one in the Leadenhall Market, alive at the time. In Shropshire one, recorded by T. C. Eyton, Esq., of Eyton, near Shrewsbury. In Cornwall, one was obtained near Penzance, in November, 1852; others at Falmouth, Gwyllyn Vase, Carrack Road, and Swanpool, but rarely. One was picked up on Hindhood, near Liphook, Surrey; one in the neighbourhood of Haslemere, in the same county, 21st. of November, 1840; several near Dunswold, February 2nd., 1841. Another in Gloucestershire; and four or five near Bristol, Somersetshire. In Yorkshire, an individual was found at Kirkhammerton; another in one of the streets of Halifax, December 16th., 1831; another on Sutton Common, near Doncaster; three or four near York; one shot near Sprotborough, on the River Don, in 1837; a few near Leeds.

In Scotland the first British specimen was obtained near St. Kilda, one of the Hebrides, in the summer of 1818. Since then one was obtained in Dumfriesshire, in the lower part of Annandale, by Sir Patrick Maxwell, Bart.; it was found dead. Another by John Jardine, Esq.; and a fourth on St. Boswell's Green, in Roxburghshire.

It has occurred in Ireland, but only occasionally.

These birds appear to be more shy than the other kinds,

and seldom follow ships in the same manner, sheering off after they have approached them, and taking another and wider range, rambling over the seas both in the dark and the light. They, like the others, discharge oil from their tubular nostrils.

They fly in a different manner from the allied species, wheeling more widely, and with firmer beatings of the wings. They also alight less frequently on the water, though they often drop their legs over it, and patter with their feet. They swim well, if necessary, but are not often seen 'naiant.'

They feed on small fishes, crustacea, and mollusca, and in search of these immerse the head underneath the surface without inconvenience a not inconsiderable time.

The note, heard both by day and night, is a shrill and querulous plaint, and is described by Audubon as resembling the syllables 'pewr-wit, pewr-wit.'

They breed in burrows, among stones, or the clefts of huge wave-worn rocks, remaining within them at this season until towards sunset, when they wander abroad in search of food, returning to their mates or young, as the case may be, in the morning, and feeding them then.

The egg is white—only one is laid. It is of large proportionate size.

Male; length, seven inches and a quarter; head, crown, neck, and nape, sooty black; chin, throat, and breast, sooty black, the last-named tinted with brown, and having a white patch behind each thigh, continued, as presently mentioned. Back, dark sooty greyish black, white on the lowest part.

The wings expand to the width of one foot seven inches, and reach, when closed, a little beyond the end of the tail; greater and lesser wing coverts, greyish brown, some of them tipped with grey, shewing a pale bar across; primaries, black; secondaries, black, the tips greyish; tertiaries, sooty black, tipped with white. The tail, of twelve feathers, is sooty black, and forked, the side feathers being half an inch longer than the middle ones; upper tail coverts, partly white; under tail coverts, sooty black, with an elongated patch of white on each side. Legs, toes, claws, and webs, black.

The female is like the male.

STORMY PETREL.

STORMY PETREL.

STORM PETREL. COMMON STORM PETREL. LITTLE PETREL. STORM FINCH. MOTHER CAREY'S CHICKEN.

Procellaria pelagica, PENNANT. MONTAGU. BEWICK.
" " FLEMING JENYNS. TEMMINCK
Thalassidroma pelagica, SELBY. GOULD.

Procellaria. *Procella*—A storm. *Pelagica*—Of or belonging to the sea.
Pelagus—The sea.

THIS is the smallest web-footed bird known, the last and least in the latter half of this my 'History of British Birds.'

It has received its name of Petrel from its habit of walking or running on the water, as the Apostle St. Peter did or essayed to do.

In Europe, some have been obtained on the lakes of Switzerland, others in France, Holland, and Italy; so, too, in Madeira and in South Africa, as likewise in America, in Newfoundland.

They breed in the Faroe Islands and at Iceland.

With us they build at Scilly; so, too, in the Hebrides, on St. Kilda and Soa; also on the western coast of Ireland; and in Scotland, on Dunvegan Head, in the Isle of kye; also at Staffa and Iona, in Orkney; pretty abundantly on the small islands near St. Margaret's Hope; at Foula, Papa, Oxna, North Ronaldshay, in the Green Holms, in Ellar Holm, and in Hunda, and the islets lying off Scalloway, and other parts of Shetland; so, too, in the Isle of Berhon, off Alderney. The late William Thompson, Esq., of Belfast, has mentioned several Irish breeding stations; and Sir William Jardine saw small parties off Douglas Harbour, in the Isle of Man, in June.

In Yorkshire, one was taken at Wentworth, the seat of Lord Fitzwilliam, in the West-Riding, about the year 1846; as Mr.

J. Lister, postmaster of Barnsley, informs me; one on the beach at Redcar, November 13th., 1851; another near Knaresborough, the latter end of October, 1846; one at Halifax, picked up in Broad Street in that town at about the same date; one was found dead in a field near Ripon, and sent to Bewick, by Lieutenant-Colonel Dalton, of Sleningford, of the 4th. Dragoons; one was observed swimming in the river in the town of Sheffield; it flew up and settled on a house, and was then shot; some few individuals have occurred near Leeds; others near Huddersfield and Hebden Bridge; one at Keighley. In Norfolk, some of these birds are generally killed every winter; in the month of November, 1824, between two and three hundred were shot after severe gales; considerable flights have occasionally been seen on the coast; one bird flying over the River Ouse, near Lynn, on the 6th. of October, 1852. In Cambridgeshire, a specimen was found at Whittlesford, November 15th., 1852; one at Bottisham, October 6th., 1855; another near Newmarket, October 17th., 1855. In Surrey, several specimens have been obtained near Godalming; one on the banks of the Thames, near Richmond, about the end of January, 1835. In Sussex, one was blown against the spire of the parish church of Hailsham, on the 26th. of February, 1848, and was picked up in the churchyard; one shot near Seaford, in October, 1856. One was found dead near Buckingham, as James Dalton, Esq., of Worcester College, Oxford, has informed me. One also in Northamptonshire, near Barton Segrave. In Derbyshire, it has occurred near Melbourne; and Bewick mentions that the late Marmaduke Tunstall, Esq., of Wycliffe, had one sent to him which was shot near Bakewell. In Oxfordshire, one near Oxford; another killed by a boy near Chipping Norton, in November, 1846; other two occurred there in the winter of 1846-7; two shot out of a flock of five, near Ensham, in December, 1837. In Cornwall, one was captured on the night of the 1st. of October, 1856, at the house of Mr. Hamilton, Wood Lawn, Falmouth; others near there, and at Carrick Road, and about Marazion and Penzance, but rarely; many occurred near Looe in the autumn of 1852. In Somersetshire, one near Bath. Several were met with on the Hampshire coast during severe weather in January, 1857. In March, 1825, one was shot from a barge in the River Thames, in the very centre of London, between Blackfriars' Bridge and Westminster Bridge. In Warwickshire, three or four are noticed as having been caught in the streets

of Coventry, and three near Birmingham. In Berkshire one was taken near Newbury.

In Ireland, as already mentioned, it is indigenous, but is usually found, when found, dead inland.

These birds are made use of by the inhabitants of the Ferroe and other islands, to serve for lamps, a wick of cotton or other material being drawn through the body, and when lighted it continues to burn till the oil in the bird is consumed. The quantity of oil yielded decreases as the summer advances, and at last it fails altogether, probably from their falling off in condition, and the supply given to their young, they being fed with the same.

The Stormy Petrel has been kept alive in confinement for several months, feeding itself with oil spread for the purpose on its feathers. The young have been brought up in confinement.

They are crepuscular and nocturnal in their habits, and towards night wander forth accordingly over the ocean.

This tiny sea-bird, ever on the wing, as well in the serenest as in the most tempestuous weather, finds equally its home in each and every quarter of the globe. Many are the sad tales it could tell of what it has heard and seen, by day and by night, in the north, the south, the east, and west. Let the imagination, aided by what others have seen and said, set the picture faintly before us in its different points of view.

Now in the north, a thousand miles from land, alone in its wanderings over the vast abyss of the unfathomable ocean, the depth below as pitchy black as the murky night-cloud overhead that will soon enshroud the face of the deep with its darksome mantle till the two elements shall be, as it were, mingled together in one common gloom, the Petrel careers along the driving waves, and revels in the advance of the coming storm. Could we be there while not there—for the very presence of man must take off from the dread solemnity which can only in its fullness belong to perfect solitude—how utterly lonely the scene, even in the height of a summer's day! and what must it be in the 'wild midnight' of the end of the year, when the short-lived glories of the arctic solstice, that have only gleamed 'too soon to fleet,' have withered and waned into the long and dreary night of the winter of winters? It is indeed in itself the same by day and by night, and yet how great the difference. The 'Northern Lights' themselves are hidden behind a black starless sky, and cutting winds that freeze

the life-blood sweep over the wilderness of waters, as if the very Furies were let slip, whirling along the driving snow, or thick showers of heavy rain, whose drops, mixed with spray, sleet, and hail, seem part of the squalls themselves; you hear—even if you are not there you hear—the loud shrieks of each gust of wind, and are aware of every coming blast. Whither is the stray bird to wing its way? Where is it to 'flee away and be at rest?' Where is it now gone? Where is it next to be seen?

Change the scene, and in the low latitudes how impressive the stillness of the glorious main! 'how awful is this place!' What must it, too, be when there is none there on the bosom of the great deep to hear the sounds that are there to be heard, and see the sights that are there to be seen? Now the Petrel follows in the wake of some gallant ship sailing on in mistaken security, and on a sudden a white squall, typhoon, or tornado sweeps across her course, and in an instant she is upset, founders, and goes down among the gurgling waves, it may be not to the bottom, for there is in the lowest deep a lower and deeper still, and a fathomless abyss which the plummet has never sounded, whether it be that its depth is so profound, or whether that there is far down below a current so strong that nothing can sink through it, but must be whirled adown this true and potent 'Gulf Stream' round and round the world. How is the ship borne along this 'Race?' Is she dashed to pieces by the terrific eddies of some 'Maelstrom?' and, if so, where, how, and when, if ever, will her shattered fragments re-appear? or does she, righted again, glide on once more, with masts standing and sails set, and perform, year after year, in some 'under current,' her 'voyage round the world?' Where is the 'Return of the Admiral' to be welcomed again? There stands the captain on his quarter-deck, and there are his crew 'those for whom the place was kept at board and hearth so long,' 'loved and lost,' but still expected perhaps by those at home, looking out in death with glazed eyes, now on the valleys, and now on the hills and mountains that bound the scene on either side, now on the 'dark unfathomed caves' that lie hid in the solitudes of the ocean bed, and now on the coral banks that rise far above to the surface. Now they overtake or now are passed by some other 'Phantom Ship,' a terror neither of them to the other; now overhead pass and re-pass the vessels of the naval nations of the world, the noble man-of-war, the stately merchantman, the fast and the slow, squadrons and convoys, the pursuers and the pursued, the 'Homeward' and the 'Outward-bound:' nothing

do they reck or wot of one another, nor ever will again in this life.—'The wind passeth over it and it is gone, and the place thereof shall know it no more.' Still the Petrel, who once followed in their wake, flits and flies on with untired wing. The sudden gust that crossed the path has gone as suddenly as it came—all is once more as quiet as it was. Now the little bird flickers forwards in the calm stillness of the tropics, and under the flaming sun of the south, which seems to have as it were, molten the sea itself into a silver mirror, or, as you might fancy, of glass, were it not for the rising from it every here and there of the flying-fish, and the dash upon it of the restless Sea-mew. One while a perfect calm broods over the whole; at another, light baffling winds, gently laden with the rich perfume of the land, arise to mock the sailor with hope of the 'haven where he would be,' hope to be broken again and again. Now the sun sets, and the whole western horizon is glorious with his departing rays; now he rises, a ball of fire, from the east, and runs again his daily course. But, again, even the long day of the tropics wanes on to its end, the eventide sky takes new and changing tints, and then the 'Great Light' of the earth sinks majestically into his gorgeous couch, while the whole of the wide expanse glows with soft hues, from which the rainbow and the pearl borrow their beauty, and gradually all subside into repose, and after heaving in long sluggish swells, the ocean is again left to sleep in its cool and quiet rest.

How great the contrast between the unutterable dreariness of a northern winter and the blaze of glory of the 'Sunny South.' But on again from one to the other the bird travels, and now as it were driven on the wings of the tempest, the gentle breeze of the hot climate turned into the icy hurricane of the north, the Stormy Petrel, whose name betokens the habitual current of its life, nears the land, and skirts and skims along the iron-bound coast. Wild is the scene on many a 'winter's evening,' each storm different from every other that has gone before it, and yet one and all alike: here are low dense clouds laden with the coming gale, and there lurid skies pregnant with tempestuous blasts; to seaward an endless desert of waters; towards the land, and brooding over the watery waste, spray, foam, and air, mingled as in one, and over all the blackness of approaching night. There is a brief lull, as if the tempest were taking breath, and girding up its strength for a stronger effort, and a frightful stillness prevails for a short space, the sky

scowls and blackens more angrily, and low clouds whirl and wheel about in uncertain eddies, all betokening a savage burst of the outpoured fury of the elements; but while other sea-birds scuttle off to seek shelter, if any may be found, the Petrel still stays, and awaits the utmost violence of the storm.

In the offing there rises up the weather-beaten hull of some doomed ship, 'lean, rent, and beggared,' which in vain struggles and strains to keep of the fatal lee-shore. She drifts nearer and nearer; you would see at once that her hour has come, and that no human power can save her. Now the darkness lowers still deeper, the mournful sighings of the air tell of the awaking of the winds from their snatched and fitful slumber, and warn that they will soon be sweeping on again with redoubled force, like a troop of gaunt and famished wolves greedy of their certain prey. The black hull looms larger and larger as the tempest-tossed vessel rises on the high wild seas outside, and the only barriers between her and the rocky cliffs, halfway up which the billows are breaking, and recoiling again in boiling surf, are the sunken rocks, 'over which stupendous breakers, lashed into fury by the angry gusts, run riot, mingling the hissing of their seething waves with the furious ravings of the blast.'

It is as nature has foretold, and the signs of the vast power of the air, which she has ushered in with many sublime portents, are quickly fulfilled. The sky above assumes a fierce and fiery appearance, and to windward a huge bank of black cloud rises up and up from the distance, and, as it comes on nearer and nearer, the 'mighty and strong wind,' in the language of Scripture, is driven, as it were, out of its dark depths to carry all irresistibly before it. With every fresh burst of the tempest a harsh screaming sound, as the howl of a legion of evil spirits let loose and borne on its ominous wings, warns of the mischief too late, the cries of the uncaged wind gather strength and wax louder and louder, as if never to be calmed again. Now, for an instant, the vivid lightning lightens up the scene, and reveals the darkness around, above, and below, to leave all still more awful than before; and following it, 'Heaven's artillery,' the thunder-clap, rolls over and echoes away among the clouds, peal upon peal and crash upon crash. And, last, night comes on with its gloomy grandeur, and the blackness of the black depth below is taken into the blackness that comes down upon it—all is black. The sea closes over the fated ship, and the wail of

the Petrel is the dirge for those who have perished with her.

But He who 'rideth upon the wings of the wind,' 'who stilleth the raging of the sea and the noise of his waves,' 'the LORD who sitteth on high,—is mightier.' He says unto the sea, 'Peace! be still;' 'He speaks the word,' and 'there is a great calm.'

So yet once more in milder climates, leaving the dreariness of high northern latitudes for the glory of the serene night of the south, and the ceaseless breaking of the sea on an iron-bound coast for its soft moanings while gently laving the golden sands, 'on fine calm evenings, after the smooth surface of the deep has put off the fiery glow imparted by the setting sun, and begins to assume the dull leaden tint of night, then the little Petrel may be seen scouring along upon the face of the sea; now he darts past the fisher's boat as it is rowing along upon its homeward course; is seen for a moment as he flits among the lagging oars, and instantly disappears among the increasing gloom of approaching night. His motions are so rapid, his appearance so sudden, and he looks so extremely diminutive, that it is only a quick eye that will detect his approach at all.'

Soon the bright and glowing tints upon the distant hill tops shade into the gathering gloom; 'now fades the glimmering landscape on the sight;' and the fanciful outlines of the far-off clouds, gilded for a brief space longer with a gorgeous light given back from the ebbing glory of the setting sun, 'too bright to last,' melts away in like manner into the subdued hues that foreshadow the coming dusk; and then again, in her turn the shining moon enlivens the face of the deep, and a shimmering path along the rippling eddies of the tide, the true pattern of the 'Field of the cloth of gold,' marked off by the darkened waters on either side, shews the sombre figure of the Petrel as it flits across.

Such are the scenes in which the Stormy Petrel acts its part.

These birds rise with difficulty from the ground, owing to the great length of their wings, and run along some distance before they can get fairly under weigh. They use their hooked bills to assist them in climbing. They fly very swiftly, and in the most buoyant manner imaginable, and are often seen skimming from the top of one wave to another, dipping the

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